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ABSTRACT

Three different bilingual, bicultural curriculum, preschool models encouraged children to use three different interaction strategies, but the models had no lasting effects on the children's first grade interactions, according to a year's observation of the communication experiences of 42 Mexican American children of varying English language proficiencies in three Southwest classroom sites. In the preschool setting, the experiences emphasized by the curriculum model in use influenced the frequency of strategy employed by the children. In the first grade, the structure of the children's communicative episodes were similar in Spanish-dominant, bilingual, and English-dominant classrooms; but the frequency of strategy use differed by classroom type. Language proficiency influenced how children used strategies, which differed with peers and adults. Interaction sequences related to language acquisition accounted for 50% of the communication acts in a given communicative episode. Children acquired interaction skills in a similar order, although those with greater English language proficiency were able to use more English strategies at an earlier age. Among children of limited English proficiency, a significant relationship existed between gains in English proficiency and an increase in the number of strategies used. The study has implications for the development of instructional practices in bilingual education settings. (SB)

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# Interaction Strategies of First Graders Who Have Experienced Different Bilingual Preschool Models

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FINAL REPORT

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## ABSTRACT

Language learning, as it occurs in educational settings, is a product not only of the instructional activities the learner experiences which are designed to promote language development, but also of the ways in which children shape their own learning experiences in both instructional and noninstructional school contexts. This study explores the communicative experiences of 42 Mexican American first graders in classrooms at three sites in the Southwestern United States. The study is longitudinal in that it builds on a data base established in Juárez and Associates' evaluation of bilingual bicultural Head Start curriculum models in examining the preschool activities of first grade children participating in the study. Using the technique of naturalistic observation, the interactions of the children with teachers and peers in a number of classroom settings were investigated. Findings suggest that although the three preschool models investigated encouraged different interaction strategies, there were no lasting effects of these strategies in first grade. Further, it is shown that type of first grade program influenced the language of interaction but that context determined the speech partner and length of the communicative episode. Finally, a relationship between the use of interaction strategies and increased language proficiency for children of limited English language proficiency was demonstrated. Implications for the organization of classroom learning situations are discussed.

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# I. INTRODUCTION

This report presents the results of a year's study of the interaction strategies used by Mexican American children with different English language proficiency in their first grade classrooms. The sample children were drawn from a population of children who experienced different preschool models at three sites in the Southwestern United States. Thus, the study is longitudinal in that it builds on a data base established in Juárez and Associates' evaluation of bilingual bicultural Head Start curriculum models in examining the preschool activities of the first grade children participating in the study. The document synthesizes the experiences of the children as determined through systematic naturalistic observations in both the Head Start and first grade classrooms, and language proficiency testing. In addition, the report summarizes the field procedures and analysis techniques used and presents the conclusions and implications of the study findings.

## A. Rationale

It is becoming increasingly clear that the study of language learning as it occurs in educational settings must go beyond investigating the product of the schooling experience and also focus on the process of language acquisition. The learning of a language, be it first or second, involves much more than the mastery of certain grammatical forms. It requires developing the ability to handle the semantic, communicative, and pragmatic functions of those forms. In the classroom, this includes both the ability to participate in the activities structured to promote the learning of language and other cognitive skills, and the ability to take advantage of the classroom resources available to shape one's own learning experiences. Consequently, the study of language learning should be concerned not only with the product of learning experiences, but also with the nature of the language interaction as it occurs in context.

Recently, researchers have begun to study the interactive process of language acquisition both in the classroom and in nonschool contexts through the technique of discourse analysis. Using this interaction-centered method, researchers are beginning to understand the cognitive and communicative strategies used by language learners, as well as the basic differences between the nature of child-child and child-adult interaction and native-nonnative speaker conversation. Using variations of discourse analysis, sociologists, linguists, and educators are seriously investigating the social competencies and effect of children on social interaction. Qualitative sociologists (Cicourel, 1974; Garfinkel, 1967; Speier, 1970) have carefully examined the language of

everyday life to attempt to define the interactive aspect of the socialization process. As Schwartz and Jacobs (1979: 225) have stated:

> Even small children can be regarded as talented artists or social engineers if we conceive of "kids' talk" or game playing as technical achievements, accomplished with use of specific knowledge, skills, and artful improvisation . . . They are not imperfect adults but full-fledged members of "kids' culture," a distinct world of daily activities with its own demands and its own possibilities. In contrast, adults, both lay persons and professionals, frequently construe children as practicing to be grown-ups and interpret their actions as faulted versions of corresponding adult actions.

Despite this call, much of the initial work in examining children's interactions in the classroom focused on teacher-directed activities or on peer interactions structured in the manner of lessons. Sinclair and Coulthard (1975) and Mehan (1979) have both investigated teacher-directed classroom situations and developed intricate models for the analysis of teacher-student interaction. Although Sinclair's aim was to linguistically characterize classroom discourse, and Mehan's to describe the social organization of classroom lessons, both emerged with similar three-step instructional sequence models. In both models the basic teaching exchange in the classroom was considered to be that of initiation (opening), reply (answering), and evaluation (follow-up) by the teacher.

In studies using microethnographic techniques of videotaping and analysis of transcripts similar to those employed by Mehan, researchers such as Cazden, et al. (1977) and Steinberg and Cazden (1979) have documented that children exhibit varying degrees of expertise in dealing with the dual aspects of the teaching role: information transfer and management of the interpersonal aspects of the teacher-student relationship. While their work provides some interesting observations as to the process of child-given instruction and differences in instructional strategies, the instruction was not natural in the sense that both the role of teacher and the content of instruction were preordained by the adult teacher.

Investigators have, however, begun to investigate the phenomenon of peer teaching in the natural context of the classroom. Cooper, et al. (1982), in a study of spontaneous peer teaching in the classroom, found that children seek and provide each other aid both in regards to the subject matter being studied and to procedural issues of the assignment. Nearly two-thirds of such episodes were found to be learner-initiated, i.e. a child sought rather than offered the aid of another. The study was limited to only one classroom, however, and there was no indication of the contextual variation in such behavior nor of the relationship of this type of interaction to the child's total speech.

Other recent studies of child-initiated interaction have also focused on specific aspects of communicative competence in the classroom

or other school contexts. Corsaro (1978), for example, studied children's social access strategies and found nonverbal means of entry into a social context important among three-four-year-old preschool children. Merritt (1982), in studying the methods by which primary school age children engaged the teacher's attention, found that manners of active solicitation vary considerably. Wilkinson, et al. (1982) have examined the ways in which children used requests in the classroom both to obtain information and to regulate the behavior of others. They found that the variety and complexity of the requests differed considerably in terms of directness, revision and compliance. Like Corsaro, Borman (1979) has focused on playground games. In her study of seven-year-old children, she analyzed patterns of turn rotation and the ability of children to remain engaged in the activity at hand.

Typically, as in these studies, the research into communicative competence in the classroom has been limited to a very specific context or to the examination of a single indicator of communicative ability. While studies of this type have served to add to our knowledge of specific aspects of communication in the classroom, they provide little information on the importance of the aspects studied to the total interactional patterns in a typical school day, or on the contextual variability in the competencies displayed by the children in the classroom.

Evidence of the importance of situational or contextual variability of speech, especially that of children, is provided by Labov (1972). His account of the significant changes in the speech production of an eight-year-old Black child brought about by the reduced formality of an interview situation and the presence of a peer is now a classic example of the importance of sociolinguistic factors in determining verbal behavior. Since then, numerous researchers (Hall, et al., 1977; Cazden, 1979; Wells, 1979; Cole, et al., 1979) have noted the fact that children's talk is heavily dependent on such factors as the task at hand, the topic of conversation, and the age and number of listeners present. Cole, Dore, and Hall (1979), in investigating the situational variability in the speech of preschool children, found that three- and four-year-old children's speech was more complicated on an expedition to the supermarket than in an interview in the classroom about the expedition. They attributed the differences to changes in the nature of the talk itself; that is, the relative and absolute frequencies of descriptions, which were found to be more complex (as measured by MLU), increased when the children were in the supermarket.

Researchers in adult-child interaction have noted similar contextual variation in adult speech to children. Bakker-Renes and Hoefnagel-Hohle (1974), for example, compared three caretaking situations of dressing, bathing, and eating with three "unstructured" or "for fun" complexes of playing, chatting after lunch, and reading a book, to find that mothers' speech to children was more complex (as measured by length of utterance and paraphrase) in free situations than in caretaking ones and most complex in book reading. Similarly, Wells (1979) reported from the Bristol study, in which the language of 128 children was being recorded four times yearly over the course of a normal day at home, that there were significant

differences in the contexts in which adults choose to initiate conversations depending on the sex of the child. Thus, as Snow (1979) stated, mothers' speech can "not be characterized as a single corpus, but must be seen as the product of specific interaction between mothers and their children...depending on the communicative demands of the situation in which it is used" (p. 37). This research suggests that the interactions between both adults and children and between children and their peers may differ in the various contexts in which a child finds him/herself in the school day.

Other research points out that a child's success in dealing with varied social contexts may be dependent to a certain degree on the communicative strategies which he or she has developed. Rubin (1975) was one of the first in the field of second language acquisition to hypothesize that the "good language learner" used conscious devices to acquire and expand on knowledge of a language. Based on her individual observational efforts as a second language teacher, she documented a mixture of general attributes of good language learners as well as some more specific techniques good language learners were observed to employ. Among the more general attributes were the ability to guess, or gather and store information in a retrievable manner, a lack of inhibition in speaking the new language, willingness to try out the new knowledge, and an attention to the form of language. These attributes of the good language learner translated into such devices as the use of circumlocution, paraphrase, and the use of gestures, direct translation and monitoring of one's own and other's speech. She acknowledged, however, the lack of systematic and rigorous research into language learning strategies and the importance of such factors as the task and context, learning stage and age of the learner, individual styles and cultural differences.

Tarone et al. (1976) and (1980) have built on such work to provide a systematic framework for discussing the varied ways in which learners deal with their lack of knowledge of the target language. Tarone classified her conceptualization of "communication strategies" into distinct areas. These included transfer strategies, in which a learner translates word for word from the native language or switches to the native language term; appeals for assistance, in which the learners ask for the correct term; simple avoidance, when the learners either do not talk about the concept or abandon an already begun message; and prefabricated patterns, in which a "regularly patterned segment of speech" was employed without knowledge of its underlying structure, but with the knowledge as to which particular situations call for what patterns. Rubin (1981) presented her own observational schedule of language learning processes and strategies which was generally consistent with Tarone's typology. She did include, however, a clarification/verification process which added such behaviors as asking for clarification or repetition of the previous statement, inductive and deductive reasoning strategies such as guessing from context and use of analogy, as well as a general practice area including such strategies as talking to oneself and intent listening to what and how something is said. The typologies developed by both Tarone and Rubin were based principally on data gathered from their own and other teachers' language classes and are thus limited to adults in a particular context.

Outside of a few largely anecdotal studies such as that of Lozano (1980) which examined the English language learning strategies used by the author's four-year-old daughter, the limited research on language acquisition strategies has been in bilingual education settings. Wong Fillmore (1976), for example, investigated the social and cognitive aspects of the English language acquisition of five Spanish-speaking children (ages 5-8) over the period of one year. Although the focus of the study was not on specific strategies, she found that individual differences among children in terms of personality, interest, and motivation tended to affect their ability to establish and maintain social contact with their peers, and in turn, the amount of input needed for learning a new language. Among her major findings was the importance of formulaic expressions in providing children with the tools to gain access to interaction. Similarly, Stovall (1977) in her investigation of eight Spanish-speaking children in elementary ESL programs, noted the frequency of simplification and reduction strategies in dealing with the demands of a second language. In both studies, however, the sample size was limited and the research did not reflect a variety of contexts.

In addition, Bialystok (1981) has attempted to show the relationship between language proficiency and the use of language learning strategies. Investigating three strategies -- practice, monitoring, and inferencing-- among high school students learning a second language, she found that practice accounted for a significant amount of the achievement on all language tasks. The study, however, relied solely on self report by the students to determine strategy use and, therefore, provided no information on how strategies were actually employed in the classroom.

The majority of studies of social interaction in bilingual classrooms have followed the same pattern as those of language acquisition in general. Early studies of social interaction in bilingual classrooms (Bruck and Schultz, 1977; Genishi, 1976; Legarretta, 1975; Schultz, 1975) focused on the phenomenon of language use in teacher-child interactions. These studies found that, generally, English was the dominant language in the classroom and that children's choice of language was heavily influenced by the structure of the classroom situation. This, in turn, was related to such factors as the type of activity and language of the speech partner. More recent research using microethnographic techniques such as those employed by Mehan, in the bilingual classroom (Moll, 1981; Carrasco, 1981) have also focused on structured lessons. Moll found that the organization of reading lessons for two classrooms of Spanish-speaking children was highly influenced by organizational constraints and by the teachers' presuppositions about the children's competence. Carrasco described the interactional strategies used by a bilingual Mexican American student in tutoring a peer. The use of strategies in other bilingual classroom contexts has largely been limited to studies of code-switching (Duran, 1981). Valdes (1981), for example, in an investigation of the use of code-switching in direct requests, has found that such language alternation was a deliberate verbal strategy which served both to mitigate and aggravate requests. Genishi, (1981) showed that six-year-old children were able to switch languages to choose language appropriate to their speech partner. Similarly, Narvaez (1981) in a study of bilingual children in Head Start, found that their choice of language in requests did not reflect language deficiencies but rather

displayed the child's ability to adjust the request to fit a particular social context.

All of the studies of children in bilingual classrooms have been limited to a small number of children generally located in one classroom and have failed to examine the previous educational history of the children in question. Although of limited scope, such research has tended to support the view that language learning is enhanced when the context of the learning situation is meaningful and relevant to the learner. However, lasting effects of particular bilingual learning situations on individual children during their early education years has not been examined. Similarly, the general use of interaction strategies in the school day and the relationship of the use of such strategies to language proficiency has yet to be examined.

## B. Objectives of the Study

The general purpose of the study was to characterize the interaction strategies of children who participated in different bilingual bicultural curriculum models in both Head Start and first grade in order to examine the influence of their preschool experiences on interactions in first grade. The nature of the classrooms in which the children were found and their varying language abilities allowed data to be gathered related to the following specific goals:

1. To examine the differences in the mode, speech partner and function of interaction strategies used by children of different English language proficiency in classrooms providing distinct language environments.
2. To investigate the contextual variation in the use of interaction strategies used by children of different English language proficiency in classrooms providing distinct language environments.
3. To determine the relationship between the use of interaction strategies and increased language proficiency among children in classrooms providing distinct language environments.

## C. Report Organization

The remainder of the report is divided into five chapters. The first, Methodology, provides a discussion of the data collection activities, the conceptual model used to organize and quantify the data, and the data analysis procedures. The subsequent three chapters present the study findings and form the bulk of the report. Chapter III entitled, The Head Start Experience, characterizes the communicative episodes engaged in by children participating in the different preschool models and examines the effects of such participation on their interactions in first grade. Chapter IV, The First Grade Experience, provides a description of the communicative episodes of the sample children across the instructional and noninstructional contexts of three distinct classroom environments. Chapter V, Individual Differences, examines the experiences of sample children

longitudinally and relates the use of interaction strategies to language proficiency. Finally, Chapter VI presents a summary of the findings and discusses their implications.

## II. METHODOLOGY

This chapter provides a description of the study sample and a discussion of the methodological procedures employed in carrying out the research. The opening sections of the chapter describe the general characteristics of the areas in which the study was conducted and the characteristics of both the first grade and Head Start samples. Subsequent sections deal with the data collection and analysis techniques, including a discussion of the model of a communicative episode used to organize the research findings.

### A. The Research Settings

The research was carried out in three communities of the southwestern United States with relatively large populations of Mexican Americans. The sites, located in Corpus Christi, Texas, East Los Angeles, California, and Rio Grande City, Texas, provided contrasting language environments and ranged from rural to urban settings.

Corpus Christi, Texas is located on the gulf coast roughly 150 miles north of the Texas-Mexican border. A city of over 230,000 people, Corpus Christi is characterized by a varied economic base which includes tourism, agriculture, shipping, and a naval base. The city is roughly 50% Mexican American. Mexican Americans are concentrated in the city's southwestern and central areas while most Anglos are located in the city's eastern and southeastern regions bordering the coast. English is the principal language of the Hispanic population, although Spanish is common in everyday discourse and on the radio and television.

The Los Angeles site was located in a Hispanic enclave of a major metropolis. The site was located about twelve miles east of the Los Angeles City Hall near the border of a section of the city known as East Los Angeles and the incorporated city of Montebello. This urban area is highly industrialized and characterized by factories and warehouses which together with local shopping centers provide most of the employment for the area's residents. During the last decade, the Hispanic population of the area has doubled, and presently Hispanics make up 83% of all of the area's residents. Recent residents tend to use Spanish as their primary means of communication whereas long-time residents are likely to use English.

Rio Grande City, Texas, a town of about 14,000 residents[1], is located along the Rio Grande River about half-way between Brownsville and Laredo. Its economic base is principally cattle ranching and agriculture. Farms situated along the river produce irrigated crops of melons,

peppers, onions, and cotton. Although oil has been produced since the early part of the century, and agriculture employs many people on corporate farms and in packing sheds, economic opportunities in the area are generally limited and unemployment is high. The overwhelming majority of residents are Mexican American (80-90%) or Mexican (10%) and the principal language of the community is Spanish, identified by 94% of the county residents as their mother tongue.

The sample in each of these settings were first graders who had participated in a bilingual bicultural preschool model or formed part of the control groups used in the evaluation of the models. Descriptions of the schools they attended are provided in the sections of the report on the findings related to the children's experience in first grade. Likewise, the discussion of the different preschool models is presented together with the results as to the experience of the children participating in different models.

B. Sample

The interaction strategies of 42 Mexican American children (23 males and 19 females) between the ages of 71 and 85 months were investigated. All of the children formed part of either the experimental or control groups that participated in Juárez and Associates' evaluation of bilingual bicultural Head Start curriculum models. Experimental and control children at each site were paired[2] using their test scores during the Head Start year.[3] Children were divided into groups based on their language proficiency. The Head Start study showed that students of different language proficiencies had different experiences in the classroom which related to different outcomes (Chesterfield, et al. 1982). Thus, three levels of language proficiency similar to those used in that study were identified for purposes of grouping the children. These were as follows:

SP-1 - native Spanish-speaking children who exhibited minimal ability in English on leaving preschool;

SP-2 - native Spanish-speaking children with more than minimal oral proficiency in English at the end of preschool; and

EN - native English-speaking children with no measurable oral proficiency in Spanish on leaving Head Start.[4]

The sample consisted of 18 SP-1 children, 16 SP-2 children and 8 EN children.

In general, children of the same language grouping within a site had similar backgrounds in terms of language use and socioeconomic status. The parents of SP-1 children spoke Spanish with these children in the home and for the most part felt that their own ability to understand, speak and read English was limited. Parents of SP-2 children reported that they used both languages with the children and rated their own language abilities as about equal in both English and Spanish. At all sites, parents of EN children regarded themselves as proficient

in English but with very limited abilities in Spanish. They spoke exclusively in English to the EN sample children. Although most parents were in manual labor or service occupations at all sites, those at East Los Angeles had a higher average income ($9,000) than did the parents at the two Texas sites ($7,000 at each). A ninth grade education was average for parents at all sites and there was little difference between child language groups. Parents of both groups of Spanish-speaking children in East Los Angeles had, on the average, been in the United States substantially less time (10 years as opposed to over 30 years) than parents of the same groups of children in Texas.

The sample children (fourteen at each site) were found in a total of twenty-five classrooms. For the purposes of this study, these classrooms could be divided into three distinct types: English classrooms in which reading instruction was carried out in English for all children; bilingual classrooms in which reading instruction was in Spanish and English for all children; and Spanish classrooms in which all children received instruction in Spanish reading only. There were fifteen English classrooms, seven bilingual classrooms and three Spanish classrooms containing sample children. Eight SP-1 children were in English classrooms, seven were in bilingual classrooms, and three were in Spanish classrooms. Eleven SP-2 children were found in English classrooms with three and two respectively being in bilingual and Spanish classrooms. Seven of the English-preferring[5] children were in English classrooms whereas the remaining EN child was in a bilingual classroom.

In order to examine the experiences provided by each of the curriculum models, the experimental children were considered as a sample for analysis of the Head Start data. A total of twenty-three children enrolled in three preschool classrooms at each site constituted the sample. The interaction strategies of eight children participating in one curriculum model in East Los Angeles and those of eight and seven children participating in different models at Rio Grande City and Corpus Christi, respectively, were investigated.

## C. Data Collection

For all data collection, the principle technique was that of participant observation in which a researcher, trained in the technique of naturalistic inquiry in educational settings, provided written fieldnotes on the behavior of individual children at the beginning and end of the school year.[6] Focused observations were made for periods of three weeks at two times during the school year-- October/November and April/May. A minimum of one hundred days of instruction was set as the criterion between the fall and spring observations of individual children.

Data collection combined the strategies of time and event sampling, as specific activities (small group, seat work, large group, recess, lunch and opening/dismissal) were sampled and each child was observed for amounts of time proportional to the percentage of time devoted to

a particular activity in a day. For example, if large group activites took place for 30 minutes and small group activities for 50, the researcher would observe a child in those activities for time samples of three and five minutes, respectively, until the daily total was reached. Children were observed for a total of 180 minutes during two days on alternate weeks of the data collection. The researcher noted the time at which an observation began and then proceeded to describe the behaviors of the designated child and all of his or her verbal and nonverbal interactions with others. After each day's observations, the observer re-wrote the rough notes taken in the classroom and coded them.

During the time on site, each researcher also administered the Bilingual Syntax Measure (BSM) individually to each child in both Spanish and English. Responses were both handwritten and audiotaped for later verification. In order to control for practice effects, tests were administered in the second language on the first day's observation of a child and in the first language on the subsequent observation some days later. All tests were scored both for SAI levels as recommended by the developers (Burt and Dulay, 1976) and in terms of average MLU.

D. Quality Control of Data Collection Activities

Training and retraining of field personnel was a major activity related to assuring the quality of the data. In the fall, as all of the field personnel had had experience in conducting naturalistic observations of young children in the classroom, the training was carried out as group problem-solving endeavors. Discussions centered on: (1) a review of role management, ethics and monitoring procedures; (2) fieldnote styles, observational strategies and the sampling procedures to be used; and (3) testing, audiotaping, and the indexing system to be used with the fieldnotes. In addition to discussions and the development of prototype indexing forms, these sessions were used for note-taking and coding exercises to ensure consistency among fieldworkers. Similarly, in the spring, as the same researchers again collected the data, retraining focused on discussions of additional information to be collected about the individual sites and classrooms, and potential difficulties in data collection and monitoring of the fieldworkers which might occur as a result of variations in classroom activities from fall to spring. Also, as in the original training sessions, fieldworkers engaged in note-taking and coding exercises to ensure the consistency of the data collected across sites.

A field manual was developed to complement and supplement the training activities. The manual presented guidelines for carrying out the field research and operational definitions of the phenomena to be observed. It included sections on sampling, note-taking, coding, indexing, testing, interviewing and field communication.

In addition to the calibration of note-taking and coding carried out during training and the development of a field manual to ensure

consistent field procedures, the principal investigator monitored all data collection. This consisted of twice-weekly phone conversations with fieldworkers. The conversations served to provide feedback on the accuracy and breadth of the fieldnotes, and to discuss changes in a researcher's role, scheduling of the various data collection activities and new codes or classroom contexts suggested for investigation by one or another fieldworker. Finally, the principal investigator reviewed all coded data for consistency among researchers.

## E. The Coding System

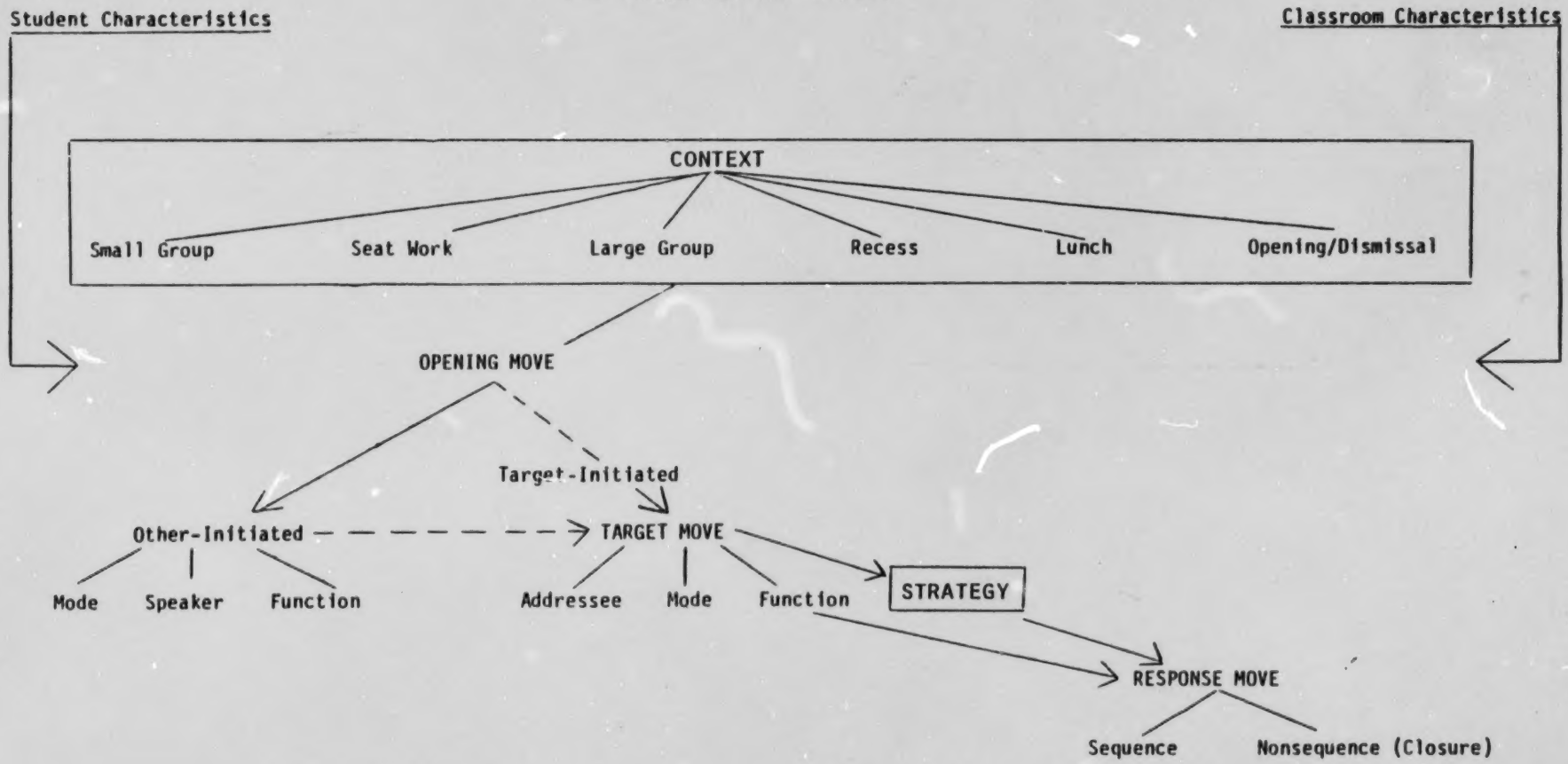
Although the focus of this study is the strategies and interaction patterns developed by Hispanic children in their acquisition of English, such strategies cannot be studied in isolation. The strategies used by children in the classroom will be a function of both the abilities that individual children bring to the classroom and the opportunities for communication provided by the classroom itself. This is especially true in classrooms providing services to language minority students where the make-up of the student population (e.g. largely limited English proficient students versus a mixture of such students with English proficient children)and the nature of the program (e.g. language arts in English only versus language arts in English and Spanish) may differ radically even within the same school. Furthermore, the situations in which children employ devices to arrive at a shared meaning within a given interaction are not limited to classroom lessons. Hence, models for the analysis of discourse such as those of teacher-student interaction (Mehan, 1979; Sinclair and Coulthard, 1975) proved too narrow and those related to conversations in general (Schegloff, et al., 1977; Dore, 1977) were too broad to be of value in answering the questions addressed in the study. Consequently, the researchers developed a data-based descriptive model which emerged from the data themselves but borrowed certain terms and concepts from previous discourse studies. We have termed this three-step model a communicative episode and it has been used to quantify and present the data.

The model of a communicative episode which is protrayed in Figure 1 summarizes the variables of interest in this study. Students' characteristics are the previous experience and abilities that are brought into play in a communicative episode. These are operationalized as participation or non-participation in one of the three bilingual bicultural preschool curricula and English language proficiency. The three levels of language proficiency mentioned previously -- SP-1, SP-2, and EN -- were examined. Classroom characteristics refer in the case of the preschool data to the distinguishing features of the curriculum model used at each site and, in the case of the first grade data, to the medium of instruction.

The influence of these aspects on the language acquisition strategies of individual children can best be examined through what we have called a communicative episode. The communicative episode as protrayed in Figure 1 consists of at least two communicative acts[8] or consecutive verbal or nonverbal turns related to a given topic, one of which

FIGURE I

THE COMMUNICATIVE EPISODE



must involve the target child. An episode can take place in any context. For our purposes all contexts are school related and consist of the instructional activities of adult-directed small group, assigned seat work and large group, the school business-related activities of opening and dismissal and the noninstructional activities of recess[9] and lunch.

A communicative episode is initiated by an opening move. This move can be a communicative act by the target child (target-initiated) and includes the speech partner of the child (i.e. adult, peer, no one in particular), the choice of mode (i.e. Spanish, English or nonverbal) and the type (function or strategy). Function refers to what the speaker is using a particular item for -- i.e. to request a linguistic or nonlinguistic response; to inform. Strategy, on the other hand, relates to tactics of how the learner arranges the items of discourse to each other so as to arrive at the goal of shared meaning in a given communicative episode. In the case of the second language learner speaking his/her second language, this may involve the task of avoiding communication breakdown so as to overcome his/her lack of linguistic knowledge. Similarly, the goal may be to expand on linguistic knowledge already attained. In this study, strategies refer to observable behaviors indicative of such goals.

The opening move may also be initiated by someone other than the target child, for example a peer, a teacher or an aide. In this case it corresponds to the communicative act immediately preceding that of the target child. As with target-initiated episodes, it includes the speech partner of the target child, the choice of mode, and the function of the speech of the initiating interlocutor. The categories of functions are based on Dore's (1977) categorization of elocutionary act types. The six categories of functions are: (1) requests, in which the speaker solicits some form of information, action, or acknowledgement; (2) responses, which directly complement preceding utterances; (3) description, which represents observable aspects of the environment; (4) statements, which express facts, beliefs, attitudes, emotions, and reasons; (5) performatives, which accomplish acts by being said; and (6) conversational devices, which regulate the verbal interaction.

The target move is that communicative act which, whether initiating an episode or occurring as a response to an opening move, represents the focal part of the exchange in this study. As mentioned, this move is composed of three parts: speech partner, mode choice, and communicative act type. Of primary interest are those communicative acts, or strategies which a child uses to either expand linguistic knowledge or deal with a lack of such knowledge. A total of 39 categories of verbal and nonverbal strategies were included in the analysis. The categories are based on a framework put forth by Tarone (1976, 1980) supplemented by the work of Bialystok (1981) and Rubin (1981) and expanded by our own data. Among the more common strategies identified are prefabricated utterances or formulaic expressions. These involve the regular use of patterned speech segments, the underlying structure of which the speaker has no knowledge. Attention getters are used to gain access to another person and thereby begin a communicative episode.

These can be verbal, such as calling out the name of a person or nonverbal such a tapping on the shoulder of a peer. Repetition, in which the learner repeats a word or phrase modelled by another is a common strategy in the school context. Repetition may be solicited by the teacher but often is used spontaneously by a child as a practice device. Another common form of practice is elaboration -- in which the speaker may consciously expand on a previous statement and provide information over and above what is called for by the communicative act. The reduced counterpart of this strategy is a one word answer, in which the learner responds with the minimal amount of words possible.

In situations of communication breakdown in which the speaker lacks the necessary linguistic knowledge to communicate, he/she may resort to a paraphrase strategy. This may include circumlocution, in which the learner describes the characteristics of the item rather than using the target item. At other times, he/she may revert to the native language or ask another speaker for assistance. If a verbal response is impossible, the child may use mime or another nonverbal strategy in place of a lexical item or structure, or simply get around the trouble source by avoiding the topic or abandoning the message. (Appendix A provides a complete list of the strategies investigated with definitions and accompanying examples from the data.)

The response move is a communicative act by the target child's speaking partners which follows the target move. This move may be a communicative act which elicits a response from the target child or another individual. In such a case the response can be considered feedback and a communicative sequence consisting of at least three communicative acts involving two or more speech partners occurs. The move may also result in no response on the part of the target child or others or in a response that is uninterpretable, thereby resulting in a nonsequence and closing the communicative episode.

All interactions were coded for context, initiator, speech partner, language, function or strategy and sequence. Coders coded the same observations at different points in the coding process to ensure interrater agreement. Levels of agreement in excess of .90 were achieved for all checks on consistency, as the fieldworkers who were experienced in the coding of observational data undertook all coding themselves.

## F. Data Analysis

Frequency counts were made of the components of each move of all communicative episodes for each child. In order to characterize the experiences of children in different types of classrooms, these were aggregated and the relative frequency of each component for children of each language group were computed for each classroom context. To determine the effects of the interaction strategies emphasized by the Head Start curriculum models, Chi-square tests were performed to compare the relative frequency with which experimental and control children used strategies and other selected components of the communicative

episode in first grade.[10] To examine the relationship between the use of interaction strategies and the increase in the language proficiency of children, rank order correlations were computed. Increases in the range of strategies used and in the frequency of strategies as a percentage of all interactions in English were related to increases in language proficiency, determined by calculating the change in scores on the BSM over each observation period.

Site summaries consisting of a description of the sociocultural environment in which the schools attended by the sample children were found, of the physical plant of each school and of the teaching strategies employed in each classroom were written by all researchers. Discussions were comparative in that each researcher concentrated on those features of a classroom (e.g. schedule, amount of Spanish and English spoken by teachers, methods of second language instruction) which might influence the interactional strategies of individual children.

In addition to completing site summaries, fieldworkers developed individual profiles of each of the children who were under intensive observation at the sites. This was accomplished by reviewing the fieldnotes taken on each child and writing a short description of the child's social and linguistic behavior in the classroom. The capsulizations thus produced were used in interpreting the particular interactional strategies used by individual children. The individual profiles also facilitated the analysis of speech samples which are presented as illustrations of general trends or tendencies of individual children throughout the text.

## FOOTNOTES

[1]Includes the population living within the city limits and in the surrounding rural areas (Rio Grande - San Isidro division of Starr County). This figure is based on the latest population data available for the area (U.S. Department of Commerce, 1981).

[2]The number of pairs totalled twenty as two of the experimental children had characteristics for which there was no match among controls.

[3]As an additional check on the comparability of the groups, T-tests were also performed on the test scores of each group of children in fall of the first grade and no significant differences were found between the experimental and control groups.

[4]The criteria for determining language groups were: SP-1 -- MLU on the Bilingual Syntax Measure $\leq 1.5$ in English; SP-2 -- MLU $> 1.5$ in English; EN -- MLU = 0.0 in Spanish. These levels differ from those used in the Head Start study as, after a year in Head Start, there were few children with no measurable oral proficiency in English at two of the sites. In this study where Head Start data are referred to, the criteria of SP-1 -- MLU = 0.0 in English, and SP-2 -- MLU $> 0.0$ in English are maintained.

[5]The concept of "language preference" rather than language dominance is used as young children in a bilingual setting are often in the process of acquiring two languages and may call upon either depending on the situation, context, and the actors involved. Thus, the terms "Spanish-preferring" and "English-preferring" are used throughout the text to designate subgroups of children. These terms are used for classificatory purposes and are not intended to suggest a conscious language choice by the children.

[6]As the focus of the study was the interaction strategies of children in naturally occurring first grade activities, the standard anthropological techniques of taking extensive and detailed fieldnotes was used and utterances were recorded by hand.

[7]At one site, permission to test the children was not granted at all schools in the fall. Thus, LAS scores from the kindergarten year, obtained from the district offices was the only quantitative measure for a number of the children at this site.

[8]Use of the term "act" here should not be confused with the linguistic term "speech act" used to refer to units at the lowest rank of discourse (Sinclair and Coulthard, 1975).

[9]Given the noninstructional nature of most physical education activities at the first grade level, these activities were included in the recess context.

[10]The reduced cell size resulting from the distribution of children in classrooms of different types precluded the use parametric statistics.

## III. THE HEAD START EXPERIENCE

This chapter is divided into two principal sections. The first, entitled The Head Start Settings, discusses the organization of preschool experiences in each of the three curriculum models in which sample children participated. Included are a description of the facilities and teaching staff, an explanation of the curriculum, and a discussion of how activities were actually implemented during the Head Start year. The second, dealing with the nature of the communicative episode, characterizes the experiences of children in each of the curriculum models and examines the effects of such participation on the children's communicative behavior in first grade.

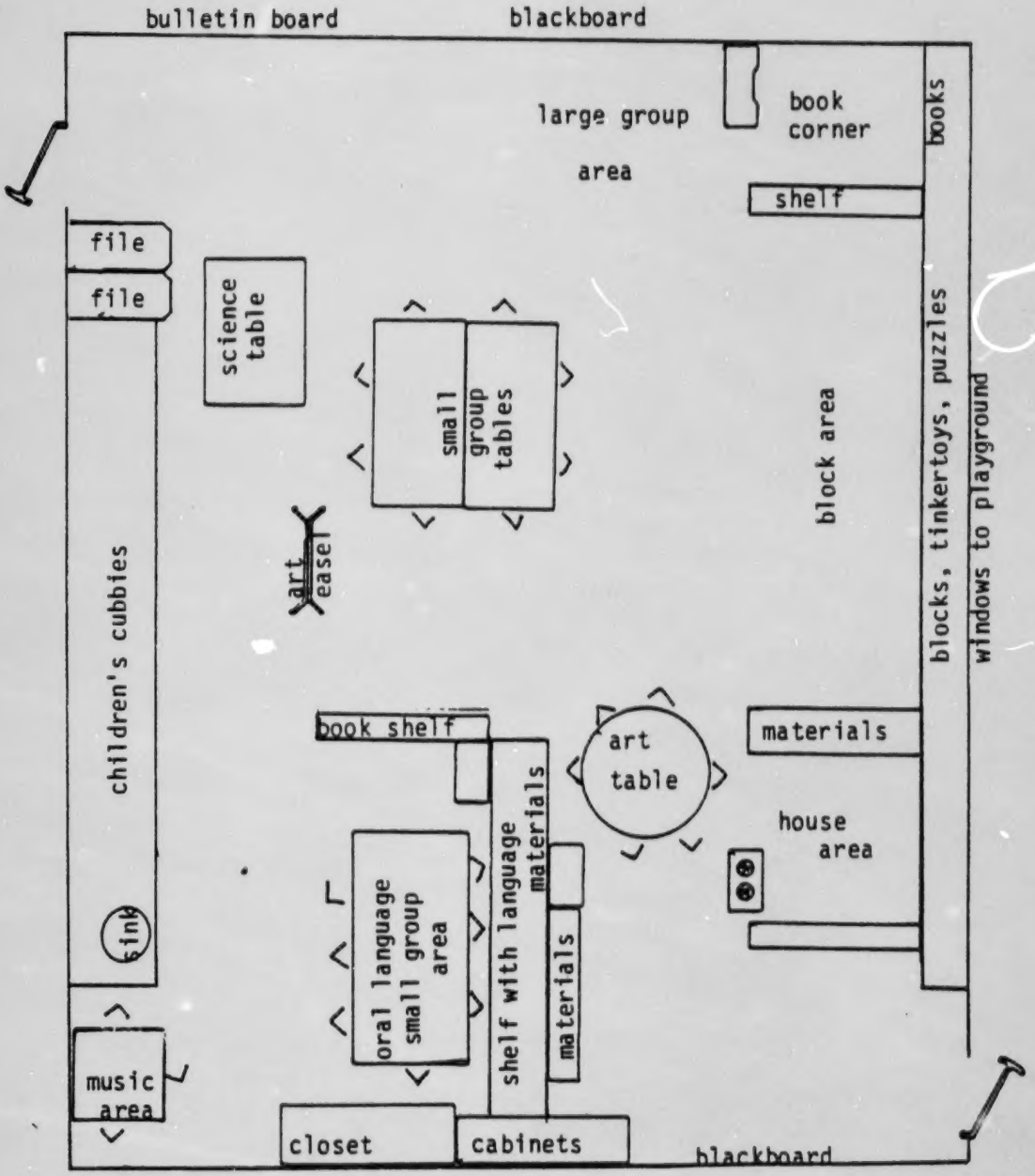
### A. The Head Start Settings

The Head Start models employed at the three sites shared a number of goals which were consistent with the Head Start philosophy. They were all designed to encourage "social competence," that is, the child's effectiveness in dealing with the present and future responsibilities both in and out of school. As bilingual bicultural models, they were also all based on the assumption that the early educational experiences provided for children whose primary language was other than English must be in the language that the children know best. The structure and organization of these experiences, however, differed considerably.

#### 1. Corpus Christi

The Corpus Christi center was located in an area isolated from the city's main residential and commercial areas. The center itself was housed in a former private high school, composed of a two-story brick building with adjacent playground and kitchen facilities. It contained five classrooms of approximately twenty children each, the majority of whom were Mexican American. The sample children were in three classrooms implementing a single curriculum model. Each room was divided into a variety of learning or activity centers, including the art center, block, discovery, dramatic play, library, manipulation, music, sand, and water areas. Each was equipped either with small tables and chairs around which children gathered to complete tasks, or with educational materials appropriate to each area such as puzzles for the manipulation area, toys, miniature kitchen appliances for the drama area, and blocks and building materials in the block area. Figure 2 provides an example of how the classrooms were generally laid out at all sites.

Figure 2
Typical Head Start Room



Although the site was administered by the director at a local community action center located at a distance from the center itself, an educational coordinator and curriculum specialist were housed at the site. They took on the principal administrative duties directly related to the Head Start staff.

Each classroom was taught by a team of two adults, one teacher and one aide. Since teacher turnover was high at the site, the make-up of the teacher-aide pairs changed considerably over the course of the year. All teaching staff, with the exception of one monolingual Black woman who acted as a replacement teacher, were bilingual Mexican American women.

The curriculum model used at the Corpus Christi site utilized an eclectic theoretical approach, taking its philosophical underpinnings principally from Piagetian and Montessorian approaches. In the model, learning was viewed as a process which involved experiencing an event or object by using all five senses. In this process, children acquired specific skills at different stages which helped them progress to the next stage. Children were encouraged to move from the stage of concrete thinking to the later stage of abstract thinking first by introducing concepts at the concrete level through the use of real objects. Later, concepts were discussed without the help of a physical reminder.

Viewed as a plan for developing a total preschool program, it provided no instructional materials. Instead, it included a set of booklets and resource materials explaining different aspects of the curriculum and providing ideas for materials development.

The model emphasized the importance of developing a child's best known language before introducing a second language. Thus, teachers were encouraged at all times to address individual children in the language they knew best. As children were predominantly English preferring, the teachers' classroom language in all three classrooms was mainly English. Depending on the make-up of the classroom, it ranged from 55% to 77% English. In addition, language-focused sessions in which children were divided into groups based on language preference were conducted. These groups were to focus on development of the child's first and second language. In the primary language circle time for English-preferring children, for example, concepts were introduced with concrete objects and elaborated on through description, questioning, and listing techniques. In the second language circle time, the same lesson was introduced in Spanish, at a lower level of complexity. A maximum of two new concepts per session were introduced through teachers' modelling followed by repetition of words and phrases by the children. Although the model directed that each language be taught separately, with only English being used in the English group and Spanish in the Spanish group, in reality, due to the preference of many children to speak English, a mixture of both languages was usually used during Spanish groups.

The Head Start day at the Corpus Christi site ran from 8:30 AM to 2:30 PM, with slight variations due to erratic bus schedules. The first 45 minutes of the Head Start day were devoted to practical chores of

arrival and mealtime activities. Children, accompanied by their teacher, ate breakfast in the classrooms in small groups seated around tables. Mealtime was often used by the teachers as an informal learning session to encourage peer interaction and concept learning. After breakfast there was a 15-20 minute large group session, featuring opening activities in which children shared experiences and participated in body movement and music exercises in both Spanish and English. This was followed by the first small group language session, referred to as dominant language circle time, which lasted approximately ten minutes. For the next 30-45 minutes, the children engaged in independent play. This accounted for the largest single type of activity engaged in at this model. During this time, the children were free to use any available materials to play in the area of their choice. There were no specific tasks or activities to be completed at any area. Adults circulated throughout the room, attending to individual children's needs. This period was followed by another ten minute language group, conducted by teachers in a small group. The remainder of the day was taken up with recess (45 minutes), lunch (one hour), nap time (75 minutes), another snack (20 minutes) and departure. Transition periods between activities were sometimes used as a planning period in which teachers, on an individual basis engaged in one-to-one interaction with the children, discussing their choice of areas and tasks.

2. East Los Angeles

The Head Start center at East Los Angeles was housed in a single prefabricated portable structure located next to a community center in a predominantly Mexican American neighborhood. It served as a single large classroom for three classes of fifteen children, all of whom were participating in the same bilingual curriculum model. Two groups of fifteen shared the space during the morning session; a single class of fifteen used the room in the afternoon.

As at the Corpus Christi site, the room was divided into a number of learning areas, divided by shelves. There were four core areas: the block area, house area, art area, and quiet area. Each area was equipped with small tables and chairs and instructional and educational materials appropriate to the specific area. All meals were served in the room.

The center at East Los Angeles was administered by a director whose office was located at the community center nearby. A head teacher at the center was responsible for direct supervision of the teachers. The instructional staff, consisting of a teacher and an aide for each classroom, were all bilingual Mexican American women. The one exception was an English-speaking woman who served briefly as an aide at the beginning of the year.

The model utilized at East Los Angeles was based on Piaget's theory of development which focuses on a child's cognitive development. The model emphasized the basic physical, cognitive, and social skills which encourage independent decision-making by children. Central to this

approach to learning was that young children learn best when involved in an activity. Learning occurred at the level of what the child actually experienced.

Described by its developers as an open framework, it did not have a set of educational activities. Instead, it supplied a series of procedures known as "key experiences," aimed at encouraging active learning and cognitive development. Teachers used key experiences such as "having one's spoken language written down and read back" to enrich and extend the experiences of preschool children.

Unlike the Corpus Christi model, the East Los Angeles model used a naturalistic approach to language learning. That is, no set period of the day was reserved for structured language instruction. Through the day balanced use of the children's first and second language was facilitated through a policy in which children, as well as teachers, were encouraged to switch languages in order to use as much as possible of their second language. Except for one classroom where Spanish predominated, English represented between 60% and 85% of all teacher language. The model encouraged heterogeneous grouping of students with a representative ratio of English, Spanish-speaking, and bilingual children at each table. By the end of the year, however, attrition and other factors combined such that one or two tables had all Spanish-preferring or bilingual children.

An integral part of the model's language development approach was the use of a specialized question and answer procedure designed to elicit elaboration by the children. The model called for the use of open-ended questions by the teacher to encourage the child to continually expand on his/her previous statement, using a variety of lexical items and grammatical structures. In reality, most of the teachers tended to gear the difficulty level of the question to the language proficiency of the child. With less proficient children, at the beginning of the year they used simple question types such as Yes/No and WH-questions which elicited short answers. Later in the year, their use of open-ended questions increased.

The preschool day was organized around a four-hour session for four days a week. The types of activities carried on at the site were centered on what the model developers referred to as the "plan-do- review" process. Planning time occurred during the thirty minute meal time (breakfast or lunch depending on the session). During this time, aimed at fostering language development through verbalization and self-reliance through decision-making, the children discussed with teachers and peers where they wished to work and what activity they wished to engage in during the next period. Following this initial session, there was an hour work time, during which children carried out their plans. As at Corpus Christi, during this time the adult's role was to recognize and support the children's work and observe and interact with individual students. After a brief ten minute clean-up time, the third major part of the day was recall time. In this ten minute session, children were given the opportunity to remember, discuss or represent what they had done during work time. It was the most likely of the three main

activities to be shortened or omitted due to time constraints. A 25 minute outdoor recess period followed. According to the model, the remainder of the day was to be taken up with a small group time, rest time, lunch (or snack) and a circle time. Small group time was that part of the children's day designated for children to work on a particular task planned by the teacher. Circle time was a large group period during which children listened to stories, or sang songs in Spanish and English. Both of these sessions, however, occurred only irregularly.

3. Rio Grande City

The Rio Grande City site was located in portable buildings occupying one section of one of the city's public schools. The school complex itself housed approximately 400 children, ranging from grades K-4, and contained, in addition to the Head Start facilities, a main school building, housing administrative offices and the kindergarten, first and second grades, a modern cafeteria where the Head Start children ate, and a separate building housing the other classrooms. Many of the children served by the center, all of whom were Mexican American, were bussed to school due to the predominantly rural nature of the surrounding area.

The three classrooms using the bilingual curriculum model were each comprised of nineteen children. They were arranged into learning centers as were the others at East Los Angeles and Corpus Christi. At Rio Grande City, these included the fantasy play area, storage area, music area, arts, crafts and cooking area, discovery area, and book corner.

The center was administered by a Head Start director at a local community action agency. Classroom staff consisted of a teacher and an aide in each classroom. All six staff members were bilingual Mexican American women.

Based on the assumption of cognitive variation, the curriculum model used at Rio Grande City emphasized the importance of recognizing and building on the learning style of each child. According to the model developers, some children are group oriented and tend to seek guidance while other children rely more on their own resources. The aim of the curriculum was to encourage the child's expression of his/her preferred learning style and subsequently reinforce a balance of learning styles so as to increase cognitive flexibility. Special emphasis was given to the development of premath and preliteracy skills, including number, letter, and name recognition and writing practice.

The curriculum program used at Rio Grande City provided model-supplied instructional materials with a bilingual bicultural emphasis. These were in the form of a set of instructional units, including suggestions for activities and description of the procedures, explanations of objectives, and materials for display and use by the children.

Similar to the model used at Corpus Christi, the curriculum program used at Rio Grande City called for daily small group sessions focused specifically on language development. It was only for second language sessions, however, that children were divided into groups based on language preference. In these groups, teachers used a mixture of Spanish and English to ensure comprehension by the children. The second language was introduced only after first discussing new experiences or introducing new concepts in the children's primary language. During these small groups, many of the teachers at Rio Grande City used techniques resembling those of the audiolingual approach, emphasizing repetition of phrases with word substitution. Given the predominance of Spanish-preferring children at this site, teachers tended to use a majority of Spanish in the classroom. This language represented from 60 to 65% of total teacher language throughout the year. The model's emphasis on basic preliteracy skills was applied to language development through the use of alphabet cards and game and rhyme techniques to teach sound-letter correspondence in both Spanish and English.

The preschool day at Rio Grande City, like that of Corpus Christi, ran from approximately 8:30 AM to 2:30 PM. Of all the curriculum programs used at the three sites, the schedule of activities at Rio Grande City provided for the least amount of unstructured free play in the classroom. Following breakfast in the cafeteria from 8:30 to 9:00 AM, where children were encouraged to eat in silence, children engaged in approximately 30 minutes of opening exercises such as greetings, the Pledge of Allegiance, announcements and some sharing activities led by the teacher in a large group session. This was followed by an hour of small group sessions using the model-supplied curriculum lessons. During this time, children rotated from table to table, where teachers and aides conducted lessons or children completed a task alone. Classroom organization was such that activities carried on during this period frequently ran over the allotted time, thus shortening indoor play in which children were encouraged to use available materials freely. After a 30 minute outdoor recess, a 45 minute circle time was conducted by the teacher. During this time, the children usually participated in movement, dancing, reciting, or the recounting of a story. Lunch followed immediately afterwards. The afternoon session consisted largely of non-instructional time, including another one hour of free play outdoors, 40 minutes of rest, a snack and preparation for dismissal. Although teachers were scheduled to conduct a fifteen minute review activity in the afternoon to reinforce the lessons of the day, this frequently did not occur due to extension of the nap period.

## B. The Nature of the Communicative Episodes

Given the differences in approaches and activities used in each of the preschool models discussed in Section A, it might be expected that the communication strategies employed by the preschool children participating in these models differed. This section discusses similarities and differences in the structure of communicative episodes at each site. While the focus of the discussion is on the principal interaction

strategies employed by the children, the components of each move of the communicative episode are compared. Finally, the differences in the experiences of children in Head Start will be examined in light of their interactions in first grade classrooms.

1. The Opening Move

Table 1 presents the relative frequencies of communicative episodes by initiator and speech partner. As can be seen, at all sites the sample children's speech was divided fairly equally between other- and target-initiated episodes, with target-initiated episodes predominating at Corpus Christi and other-initiated episodes forming the majority of interactions at the other two sites. Of the target-initiated episodes, those addressed to no one in particular represented a relatively small (10-12%) percentage of the total number of initial communicative acts. Differences among the sites in the orientation toward adults or peers, consistent with the structure of the models, are also evident.

At the Corpus Christi site, there was a relatively greater frequency of episodes with peers than at the other two sites. This reflects both the structure of the model and the way in which it was implemented at Corpus Christi. Since a larger proportion of time was spent in free play sessions at Corpus Christi than at the other sites, the children interacted more frequently with each other. Thus, Corpus Christi also had the highest proportion of other-initiated speech by peers. The irregular implementation of the adult-led language-focused group sessions, discussed previously, contributed to the lower percentage of other-initiated interactions at this site.

The remaining two sites were similar in their patterns of initiation and speech partner. Both were more adult centered than Corpus Christi, contributing to the higher percentages of adult-initiated episodes. At Rio Grande City, for example, as much of the class time was spent working at centers with adults, over 80% of other-initiated speech was begun by adults. Similarly, at East Los Angeles where the Head Start day included a number of adult-led activities, higher percentages were found. The Rio Grande City sample children, however, seemed less oriented to adults in the interactions that they themselves initiated, as indicated by the fact that unlike the other sites their target-initiated interactions with peers consistently outnumbered those with adults.

Additional differences related to the speech partner were found when the language of the interactions was investigated. Table 2 presents the relative frequencies of the mode of the communicative episodes at each site. As evident from the table, episodes beginning with a nonverbal move were relatively infrequent, accounting for less than 15% of the episodes at any one site. There were, however, considerable differences in language usage patterns, reflecting the differences in sociocultural milieu and the make-up of the classroom in terms of language proficiency.

Table 1: Target-initiated vs. other-initiated episodes by speech partner in Head Start sites.

| | CORPUS CHRISTI | EAST LOS ANGELES | RIO GRANDE CITY |
|---|---|---|---|
| | % | % | % |
| TARGET | 53 | 44 | 46 |
| Adult | 42 | 48 | 32 |
| Peer | 39 | 30 | 42 |
| No One in Particular | 19 | 22 | 26 |
| OTHER | 47 | 56 | 54 |
| Adult | 63 | 71 | 84 |
| Peer | 37 | 29 | 16 |
| TOTAL | 100 | 100 | 100 |
| Adult | 52 | 61 | 60 |
| Peer | 38 | 29 | 28 |
| No One in Particular | 10 | 10 | 12 |

Rio Grande City was the only site at which the sample children used Spanish a majority of the time. Fifty-five percent of all episodes over the course of the preschool year took place in Spanish at that site. These percentages tend to understate the general use of Spanish, however, as at the beginning of the year nearly three-fourths of the English language use was accounted for by three of the eight Rio Grande City children -- those that entered preschool with communicative abilities in English (Chesterfield et al., 1982). By the end of the year the progress of the remaining five children at Rio Grande City was evident in the fact that they accounted for nearly 50% of the English episodes.

Another distinguishing characteristic of the language usage at Rio Grande City was that among themselves, children tended to speak Spanish. This is evident from the fact that while the percentage of other-initiated episodes was almost equally distributed between Spanish and English, the majority of target-initiated episodes at that site was in Spanish, a trend not found at the other sites. Thus, in the predominantly Spanish-speaking environment of Rio Grande City, English when used was, for most children, the language to be used with adults, whereas Spanish was the language of peer interaction.

At the remaining two sites, Spanish-initiated episodes made up approximately one third of all communicative episodes, with Corpus Christi accounting for the least amount of Spanish spoken. In contrast to Rio Grande City, at Corpus Christi the adult generally took the initiative in interacting in Spanish with the children. This is shown by the fact that at this site other-initiated episodes accounted for by adults were more often in Spanish than were target-initiated episodes involving adults. This reflects the teachers' attempts to use Spanish during the Spanish language circle times. However, many of the children came to prefer the use of English among themselves in the classroom and tended to use this language even during Spanish language sessions. The only exceptions to this were two Spanish-preferring children (Ramona and Julio) who entered school with little or no proficiency in English and accounted for the majority of the target-initiated episodes in Spanish at that site.

Given the number of children at the East Los Angeles site who entered the Head Start year with no measurable oral proficiency in English, the high percentage of English episodes is surprising. This is explained in part, however, by the individual differences among the children. The high number of target-initiated episodes in English reflects the skewing influence of two very verbal monolingual English-preferring girls (Carmen and Susan). These children, unlike their Spanish-preferring peers, tended to initiate interactions and together accounted for a large part of the target-initiated episodes in English. Spanish, on the other hand, was used more frequently in other-initiated episodes than in target-initiated ones. This, as in the case of Corpus Christi, reflects the teachers' emphasis on the use of Spanish or simultaneous translation when addressing the children who were predominantly Spanish-preferring.

Table 2: Target-initiated vs. other-initiated episodes by language in Head Start sites.

| | CORPUS CHRISTI | EAST LOS ANGELES | RIO GRANDE CITY |
|---|---|---|---|
| | % | % | % |
| TARGET | | | |
| English | 60 | 63 | 33 |
| Spanish | 26 | 28 | 64 |
| Nonverbal | 14 | 9 | 3 |
| OTHER | | | |
| English | 57 | 53 | 46 |
| Spanish | 34 | 38 | 47 |
| Nonverbal | 9 | 9 | 7 |
| TOTAL | | | |
| English | 58 | 57 | 40 |
| Spanish | 30 | 34 | 55 |
| Nonverbal | 12 | 9 | 5 |

The choice of language, then, at all sites, was closely related to differences in the nature of the activities engaged in and to the level of English proficiency of the children. These same factors influenced the different ways in which children interacted with peers and adults; that is, the strategies they used.

2. The Target Move

Table 3 presents the relative frequency of the top ten strategies occurring across all the sites in both languages. As can be seen, formulaic expressions and verbal attention getters were the strategies employed most consistently at each site, with both ranking among the top three strategies in relative frequency of use during the Head Start year. The way in which these strategies were used was also similar at all of the sites. Thus, they will be discussed separately before comparisons of the patterns of interactional strategies for each site are made.

a. Verbal Attention Getters

Children at the Head Start level generally used verbal means to attract attention as evident from that fact that there was a consistently higher percentage of verbal to nonverbal attention getters. As might be expected, it was at the two sites where target-initiated interactions were more frequent -- Rio Grande City and Corpus Christi -- that the proportion of verbal attention getters to total strategies was greatest.

The form of verbal attention getting was similar across all sites. With peers, children tended to use a directive plus the name of the child they were addressing, as in "Mira, Mando," or "look it," and "Hey, Mark." With adults, the directive was often dropped, and children used the formal designation for the adult at that site. At East Los Angeles and Corpus Christi this was "teacher," while at Rio Grande City it was the use of the regional "Miss."

The language of the attention getting device was consistent with the language usage patterns discussed earlier. At both Rio Grande City and East Los Angeles, especially at the beginning of the year, verbal attention getters accounted for a low percentage of verbal strategies in English -- 5% and 7% -- but rose dramatically in the spring. Children at these sites used primarily Spanish to establish contact with peers and adults in the classroom throughout the year. In the spring, however, the use of verbal attention getters in English increased dramatically.

b. Formulaic Expressions

Formulaic expressions, even at the beginning of the year, accounted for 16, 16, and 25% respectively of English strategies at Corpus

Table 3 : Comparison of most frequently occurring strategies by Head Start site[1]

CORPUS CHRISTI

| | Time I | | | Time II | | | Total Time I & Time II | | |
|---|---|---|---|---|---|---|---|---|---|
| | E[2] | S[3] | T[4] | E | S | T | E | S | T |
| VERBAL STRATEGIES | % | % | % | % | % | % | % | % | % |
| Repetition | 24 | 31 | 21 | 27 | 19 | 18 | 25 | 27 | 19 |
| Attention Getters | 27 | 20 | 19 | 23 | 9 | 14 | 25 | 16 | 17 |
| Memorization | 4 | - | 2 | 7 | 6 | 5 | 5 | 2 | 3 |
| Formulaic Expression | 16 | 2 | 9 | 14 | 16 | 10 | 15 | 7 | 10 |
| Elaboration | 9 | 22 | 10 | 7 | 16 | 6 | 8 | 19 | 8 |
| One Word Answer | 2 | 2 | 1 | 3 | 3 | 2 | 2 | 2 | 2 |
| Talk to Self | - | 2 | - | 3 | - | 2 | 1 | 1 | 1 |
| Role Play | 5 | 6 | 4 | 1 | 6 | 2 | 3 | 6 | 3 |
| NONVERBAL STRATEGIES | | | | | | | | | |
| Avoidance | NA[5] | NA | 5 | NA | NA | 6 | NA | NA | 6 |
| Mime | NA | NA | 5 | NA | NA | 8 | NA | NA | 7 |
| Attention Getter | NA | NA | 5 | NA | NA | 4 | NA | NA | 5 |
| Identification | NA | NA | 5 | NA | NA | 5 | NA | NA | 5 |

[1] Includes those verbal strategies which represent at least 10% of strategies in the target language for at least one site. Nonverbal strategies are those accounting for at least 5% of the total language at any one site. Percentages do not add to 100% due to less commonly occurring strategies not shown here.

[2] Represents percentage of the total English strategies.

[3] Represents percentage of the total Spanish strategies.

[4] Represents percentage of all verbal and nonverbal strategies.

[5] "NA" designates not applicable.

Table 3 continued

EAST LOS ANGELES

| | Time I | | | Time II | | | Total Time I & Time II | | |
|---|---|---|---|---|---|---|---|---|---|
| | E[2] | S[3] | T[4] | E | S | T | E | S | T |
| VERBAL STRATEGIES | % | % | % | % | % | % | % | % | % |
| Repetition | 7 | - | 5 | 10 | - | 7 | 9 | - | 6 |
| Attention Getters | 5 | 11 | 6 | 14 | 22 | 12 | 11 | 17 | 10 |
| Memorization | - | - | - | - | 7 | 1 | - | 3 | - |
| Formulaic Expression | 16 | - | 10 | 10 | - | 7 | 13 | - | 9 |
| Elaboration | 40 | 53 | 37 | 31 | 27 | 24 | 34 | 40 | 29 |
| One Word Answer | 22 | 6 | 15 | 7 | 22 | 8 | 13 | 14 | 10 |
| Talk to Self | - | - | - | 17 | 6 | 12 | 10 | 3 | 7 |
| Role Play | - | 23 | 5 | 2 | 6 | 2 | 1 | 14 | 3 |
| NONVERBAL STRATEGIES | | | | | | | | | |
| Avoidance | NA | NA | 7 | NA | NA | 8 | NA | NA | 7 |
| Mime | NA | NA | 1 | NA | NA | 1 | NA | NA | 1 |
| Attention Getter | NA | NA | 3 | NA | NA | 1 | NA | NA | 2 |
| Identification | NA | NA | 5 | NA | NA | 8 | NA | NA | 6 |

Table 3 continued

RIO GRANDE CITY

| | Time I | | | Time II | | | Total Time I & Time II | | |
|---|---|---|---|---|---|---|---|---|---|
| | E[2] | S[3] | T[4] | E | S | T | E | S | T. |
| VERBAL STRATEGIES | % | % | % | % | % | % | % | % | % |
| Repetition | 18 | 23 | 18 | 23 | 16 | 16 | 21 | 20 | 17 |
| Attention Getters | 7 | 37 | 18 | 14 | 22 | 15 | 10 | 29 | 16 |
| Memorization | 17 | 6 | 10 | 18 | 14 | 13 | 17 | 10 | 11 |
| Formulaic Expression | 25 | 11 | 16 | 13 | 13 | 11 | 19 | 12 | 13 |
| Elaboration | 4 | 2 | 3 | 9 | 7 | 7 | 7 | 5 | 5 |
| One Word Answer | 1 | 2 | 1 | 1 | 4 | 2 | 1 | 3 | 2 |
| Talk to Self | 1 | - | - | 1 | 3 | 2 | 1 | 2 | 1 |
| Role Play | 1 | 7 | 4 | 1 | 5 | 3 | 1 | 6 | 3 |
| NONVERBAL STRATEGIES | | | | | | | | | |
| Avoidance | NA | NA | 5 | NA | NA | 7 | NA | NA | 6 |
| Mime | NA | NA | 2 | NA | NA | 4 | NA | NA | 3 |
| Attention Getter | NA | NA | 1 | NA | NA | 1 | NA | NA | 1 |
| Identification | NA | NA | 4 | NA | NA | 2 | NA | NA | 3 |

Christi, East Los Angeles, and Rio Grande City. It was at Rio Grande City, the site in which the English language proficiency of the children was the least developed, that formulaic expressions in English accounted for the greatest percentage of strategies over the entire Head Start year. Typical of the use of formulaic expressions by children with little oral proficiency in English was the following example taken from Rio Grande City. Miguel was a Spanish-preferring child who entered Head Start with no measurable oral proficiency in English. By the end of the year, however, he had successfully incorporated certain English expressions into his repertoire, especially those that helped him to regulate games.

(Three children are gathered at a small table, playing with puzzles.)

Miguel: Yo le voy a ganar.

Yolanda: Yo sabo este (referring to puzzle she has worked on previously).

Miguel: Este puzzle no sive (sirve).

Yolanda: Sí, sirve.

Lupe: Yo gané.

Miguel: (Protests) No, no dije 'ready let's go.'

Teacher: (Interrupts exchange by putting on Hokey Pokey record and encouraging group:) Everybody wake up!

Lupe: (Trades puzzles with Yolanda, and begins:) Mark, go.

The function of the formulaic expression within this Spanish conversation is striking. Miguel had correctly associated the game regulator "Ready, let's go" with situations in which a race was about to begin. It represented a memorized phrase which he inserted into his predominantly Spanish repertoire to manage play. His Spanish-preferring classmate, Lupe, on the other hand, had only memorized selected parts of the phrase.

The use of formulaic or routine expressions was not confined to English. At two of the three sites, approximately 10% of the strategies in Spanish were of this type. Most of these were accounted for by Spanish-preferring children. Given that the Head Start children were still in the process of acquiring both English and their first language, these data suggest then, that the use of formulaic expressions is an important first language strategy also.

The relative frequency of use of the remaining strategies relates to the differences in the experiences provided by the bilingual curriculum models. Thus, the particular strategies used by children participating in each model will be discussed separately, with comparative data from other sites being presented as appropriate.

c. Corpus Christi

The most common strategy at Corpus Christi -- accounting for the highest percentage of both Spanish and English at both data collection periods -- was repetition. Given the emphasis of the model on the use of concrete objects for vocabulary building, the teachers frequently used modelling and eliciting repetition of words and phrases in their small group language activities. They, themselves, also frequently repeated after the children. The following example was typical of the vocabulary building technique used by teachers at Corpus Christi. It occurred during a Spanish language circle time in which the teacher was focusing on fruits with bilingual English-preferring children such as Ruth. As was common, the teacher used the concrete objects, fruits themselves, in the lesson.

| | |
|---|---|
| Ruth: | (Eats her slice of orange) |
| Teacher: | ¿Cómo se llama esta, Doris? |
| Doris: | Naranja |
| Teacher: | (With a grapefruit)<br>¿Cómo se llama esta, Max? |
| Robby: | Toronja |
| Max: | 'Oronja |
| Teacher: | ¿Cómo se llama, Jośe? |
| Ruth: | (With others)<br>Toronja |
| Teacher: | (With an orange)<br>¿Y esta? |
| Ruth: | Orange |
| Teacher: | Na-ran-ja |
| Ruth: | (With others)<br>Na-ran-ja |

Here, the teacher structured the lesson around the fruits which she displayed to the children. She checked each child's understanding of the lesson by asking each individually the same question -- "¿Cómo se llama?" The adaptation to the routine is reflected in the fact that the children frequently spontaneously repeated in unison after the teacher, even without the teacher's soliciting to do so. Max repeats after his friend Robby answers his question for him.

The teachers frequently carried over this teaching technique to other activities, and the children responded in the same way. During play time, for example, when Johnny and Ricardo, a Spanish-preferring sample child, were playing with different colored clay, the aide utilized the activity to drill them on their colors:

Aide: (Holds some green clay and asks:)
What color is it?

Johnny: Red

Ricardo: Red

Aide: (Looks at the clay)
¿Qué color es?

Johnny: Green

Ricardo: Green

Aide: (Hands them clay and responds:)
OK

Here, Ricardo spontaneously repeated his peer's incorrect answer. When the teacher indirectly indicated their error and repeated the question in Spanish, Ricardo used the same strategy.

d. East Los Angeles

The singularity of the consistent use of the open-ended questioning method directed by the model at this site, described previously, tended to elicit two predominant strategies in response to the teacher's question. This is evidenced by the fact that over one-third of the strategies used at East Los Angeles at both time periods were accounted for by elaboration and one word answers. A typical communicative sequence at this site took the form of question-answer-question-answer in which the feedback move by the initiator, the teacher, consisted of another question based on the initiating question. Each question was designed to elicit further elaboration on the previous statement by the child. The communicative episodes resulting from this method can best be exemplified by a comparison of an identical context at Corpus Christi and East Los Angeles. Each of the examples that follows took place in a planning period at the beginning of the day. This activity, common to both models, occurred in a small group situation in which the teacher worked individually with each child. In both cases, the activity was designed to encourage the children's decision-making ability by permitting them their choice of task and play area. The two preschool girls included in these examples, Ramona and Alicia, were both Spanish-preferring children who interacted infrequently with their peers and were generally considered shy and withdrawn.

Corpus Christi:

Teacher: Where are you going to go?

Ramona: High water

Teacher: ¿Dónde?

Ramona: High water

Teacher: Water play

Ramona: Water play

Teacher: Bueno

Ramona: (Leaves for the sand and water area)

East Los Angeles:

Teacher: ¿Dónde vas a trabajar?

Alicia: (No response)

Teacher: ¿Dónde vas a trabajar?

Alicia: Area de arte

Teacher: ¿Qúe vas a hacer? What are you going to do?

Alicia: Hacer y pegar

Teacher: ¿Hacer y pegar qúe?

Alicia: Voy a pegar palitos.

Teacher: ¿Dónde vas a pegar? Where are you going to glue it?

Alicia: (No response)

Teacher: ¿Qúe vas a usar?

Alicia: Papel orange

Teacher: Anaranjado. ¿Qúe vas a hacer? What are you going to make? . . .

In both examples, the children preferred to answer with a minimal response. The teachers' responses to the children at the two sites, however, differed dramatically. At Corpus Christi, Ramona answered the teacher's question with an enigmatic, pidginized response. The teacher immediately switched to the child's preferred language to ask for clarification and when Ramona only repeated her original answer, the teacher provided the correct term. Without prompting by the adult, Ramona repeated the proper term, which the teacher evaluated in a feedback move with "bueno" and Ramona left. Once the instructor had successfully interpreted the child's response, the episode ended, with Ramona's participation in the episode limited to mere repetition of her own and the teacher's utterance.

At East Los Angeles, on the other hand, the episode was longer and resulted in Alicia's elaboration of an initial thought. With the exception of one turn, all of the teacher's utterances were questions which rephrased and expanded on the child's preceding utterance so as to encourage Alicia's use of language. Since Alicia's ability in English was limited at this point of the year, the teacher used WH-questions, whereas later in the year or with more proficient children she would use open-ended questions.

By the end of the year, the percentage of one word responses in English had dropped considerably as the expanding language proficiencies

of the children and their socialization into the routine of the daily question-answer session made them more likely to elaborate automatically on their responses. This is exemplified in the following episode from the spring in another planning session with the same child, Alicia.

Teacher: ¿Adónde vas? Where are you going?

Alicia: Area de la casita para cocer huevos. (She gets up and points to chips which will serve as eggs)
Voy a usar . . . chile, zanahoria y pepino.

Teacher: ¿Y despúes? What is your second plan?

Alicia: Area de arte. Voy a hacer un libro y una casa con techo.

Teacher: ¿Qué vas a usar?

Alicia: Crayolas, marcadoras . . . con dos ventanas y arboles, dos arboles . . . Y es todo.

Although Alicia continued to use Spanish, she spontaneously added information about the activities she planned to pursue in each area. She did this for both plans and finished the sequence by anticipating the next question.

In contrast to the East Los Angeles site, where all but one of the sample children used elaboration in English, the use of this strategy in English at other sites was confined to very few children.

e. Rio Grande City

The relative frequency of the strategy of memorization distinguished Rio Grande City from the other two models. This strategy accounted for 10% and 13% of total strategies at Times I and II respectively, whereas it reached a maximum of only 5% at any time period at the other sites. The curriculum model's emphasis on preliteracy and premath activities affected the children's use of strategies. Much of the children's use of English related to premath was structured to encourage memorization of the sequence of numbers. The example of Janet, a Spanish-preferring child who entered preschool with some proficiency in English, typified the memorization strategy used by many of the children at this site.

Teacher: (Asks the children in English if they have tricycles)

Janet: (Nods)

Teacher: (Asks how many wheels the cars they saw in the parking lot had)

Janet: One, two, three, four

Teacher: Were they round or square?

Janet Round

Teacher: How many trucks?

Janet: One, two, three, four, five

Teacher: (Asks if there was a white truck)

Janet: No

Teacher: (Asks if there was a green truck)

Janet: Yes

Teacher: Uh huh (Then asks if there was a black one)

Janet: (Shakes head)
Mi poppy trae una black.

Here, in the same sequence, Janet used a memorization strategy twice to respond to the teacher's questions. Each time the teacher asked her a "how many" question demanding a number, Janet recited aloud the sequence of numbers in English to arrive at the correct answer. This was in contrast to the strategies she used to respond to the teacher's questions regarding concepts of color and shape, where twice she responded with one word, and once elaborated, with a mixture of English.

At this site, teachers frequently used alphabet cards for letter recognition. Bonita was one of the few Rio Grande City Spanish-preferring children who entered preschool with some measurable oral proficiency in English. Her participation in these letter recognition exercises serves to typify the experiences encouraged by the model. At the beginning of the year she was observed proudly displaying her name card on her cubbyhole to her sister and saying "Aquí dice mi nombre." Later in the year, she was observed in a small group exercise in which the teacher used English alphabet/picture cards supplied by the model to drill preliteracy skills involving letter recognition.

Teacher: What is this? (Holds up F card featuring picture of a flame)

Group: Fire

Bonita: F

Teacher: (Displays P card and asks Fala for word beginning with P)

Fala: Patti

Bonita: (With others)
Patti

Teacher: (Holds up T card)

Bonita: T - table

Others: (Yell out other options)

Bonita: Tony

Here Bonita exhibited her socialization into the routine of the exercise by automatically blurting out the beginning letter of the word before the teacher elicited it. As was commonly done by all the children at her site, she repeated the answer of her peer, Fala.

The focus of the model being implemented at Rio Grande City on premath and preliteracy was emphasized when the frequency with which children at the three sites were exposed to activities involving such content was compared. Chi-square analyses revealed significant differences favoring the Rio Grande City children over those of the other two models in terms of their relative exposure to premath and preliteracy activities.

### 3. The Response Move

The previous discussion has shown that each model tended to encourage the use of a distinct strategy characterizing that model. An important question still remaining is whether the use of different strategies resulted in different types of communicative episodes. As evident from Table 4, nonsequences predominated over communicative sequences at all sites. East Los Angeles, however, had a consistently higher ratio of sequences to nonsequences than the other two sites. This would seem to be a result of the question-answer teaching technique of the model being implemented at that site. This technique encouraged the strategy of elaboration on the part of the children. That the activities and related strategies at East Los Angeles supported communicative sequences or longer communicative episodes is further shown by the average number of turns involving the target child in each episode. At East Los Angeles there was a substantial increase in the number of turns whereas at the other sites it remained unchanged.

The patterns at Rio Grande City and Corpus Christi are also consistent with the strategies and activities encouraged at those sites. Communicative episodes at these sites resulted in communicative sequences only about one-third of the time. This suggests that strategies such as memorization and repetition, which characterized those sites, do not lead to sustained interaction as they may not elicit a feedback move. In addition, Rio Grande City, of all sites, had the shortest average number of turns by the target child in sequences. Thus, a highly structured classroom schedule which involves the children throughout the day in regular tasks may reduce the length of conversations among both adults and peers.

### 4. The Head Start Experience and Communication in First Grade

The discussion in the previous subsections has pointed out that there were important differences in the nature of the communicative episodes and the strategies used by the children participating in the different bilingual Head Start curriculum models. In order to examine whether these were carried over to first grade, a series of Chi-square

Table 4 : Overview of communicative episodes in Head Start sites.

| | CORPUS CHRISTI | | EAST LOS ANGELES | | RIO GRANDE CITY | |
|---|---|---|---|---|---|---|
| | Time I | Time II | Time I | Time II | Time I | Time II |
| Type of Episode | % | % | % | % | % | % |
| Sequence | 34 | 38 | 47 | 42 | 35 | 39 |
| Non-sequence | 66 | 62 | 53 | 58 | 65 | 61 |
| Average number of Turns | 2.0 | 2.0 | 2.2 | 3.5 | 1.7 | 1.7 |

tests were performed, comparing children who participated in the models to matched children at the same sites who did not. The pairs of children were compared on the frequency of several observed behaviors related to classroom communication. These comparisons included the proportion of other- to target-initiated episodes, the percentage of English strategies to total use of interaction strategies, the total number of different strategies used during the first grade year, the relative frequency of strategies to functions, the use of predominant strategies at each site, the ratio of sequences to nonsequences, and the average number of turns per sequence. As shown in Table 5, with the exception of one measure at Rio Grande City, no significant differences were found between the two groups of children at any of the sites. Similarly, when growth in English language proficiency of the matched pairs at the end of the first grade year was compared, there were no significant differences between the two groups at any site. (Appendix B provides the summary data related to these comparisons.)

Thus, it appears that the differences found in the communicative experiences of children who participated in different preschool models did not serve to distinguish them from their counterparts at the same site. This would seem to be at least in part a result of the differences in the classroom environments in which the sample children were located in first grade. A description of the experiences of the sample children in different types of classrooms is found in the succeeding chapter.

## C. Summary

Both similarities and differences were found in the nature of the communicative episodes involving those sample children who participated in experimental bilingual bicultural curricula during Head Start. Reanalysis of the observational data gathered during Juárez and Associates' evaluation of these curriculum models showed that the 23 children forming part of the sample for the present study generally employed the same interaction strategies. The relative frequency with which these strategies were employed was, however, influenced by the classroom experiences emphasized by each of the curriculum models. The question-answer-question-answer technique called for by the model being implemented in East Los Angeles led to relatively greater use of elaboration by children at that site. This technique also encouraged longer communicative episodes involving the target children than were observed at the other sites. The emphasis given to premath and preliteracy skills by the model being implemented at Rio Grande City resulted in relatively greater use of the memorization strategy by children at that site. In addition, children at this site engaged in communicative episodes related to these skills with significantly greater frequency than did children at the other sites. Children participating in the model being implemented at Corpus Christi had relatively more frequent communicative episodes with peers than did children at the other two sites and a more balanced use of the most general strategies. The attention given to vocabulary building through modelling encouraged the use of repetition by the Corpus Christi children. When children at each site were compared to a matched sample of

Table 5 : Chi square assessment of the differences in performance of the experimental and control children on selected characteristics of the communicative episode.

| VARIABLE | Corpus Christi | East Los Angeles | Rio Grande City |
|---|---|---|---|
| Average number of turns per sequence | 1.14 | .28 | .82 |
| Proportion of sequences to nonsequences | .34 | .08 | 5.32[1] |
| Proportion of tartet to other initiated episodes | .70 | 3.00 | 3.00 |
| Proportion of strategies to functions | 3.00 | .70 | .82 |
| Number of different strategies in English | .82 | .10 | .10 |
| Percentage of strategies in English | .00 | .28 | .10 |
| Use of the predominant[2] strategy | .28 | .25 | .00 |

[1] Significance at the $p \leq .05$ level.

[2] The predominant strategies were as follows: Corpus Christi - repetition; East Los Angeles - elaboration; and Rio Grande City - memorization.

children as to their communicative experiences in first grade, there appeared to be no lasting effects of the differences observed between models.

## IV. THE FIRST GRADE EXPERIENCE

This chapter is divided into two main sections: the First Grade Settings and the Nature of the Communicative Episode. The first section summarizes the characteristics of the schools and the schedule of activities in each of the classrooms containing sample children. It shows that the organization of activities and the contexts in which such activities occurred were similar at all sites. The major difference between sites was in the spatial arrangement of the classrooms, whereas the difference in classrooms across the sites was the medium of instruction.

The second section discusses the findings of the study related to the nature of the communicative episodes observed in first grade classrooms. It is organized in terms of the model of a communicative episode presented previously. Thus, the section begins with a discussion of the opening move. A general characterization of the opening move in the three types of classrooms under investigation is followed by a detailed analysis of contextual differences related to this component of the communicative episode. Subsequent subsections dealing with the target move and its related strategies and the response move, follow the same format. Detailed frequency counts are presented and, where appropriate, complemented by descriptive data gathered during the observation process.

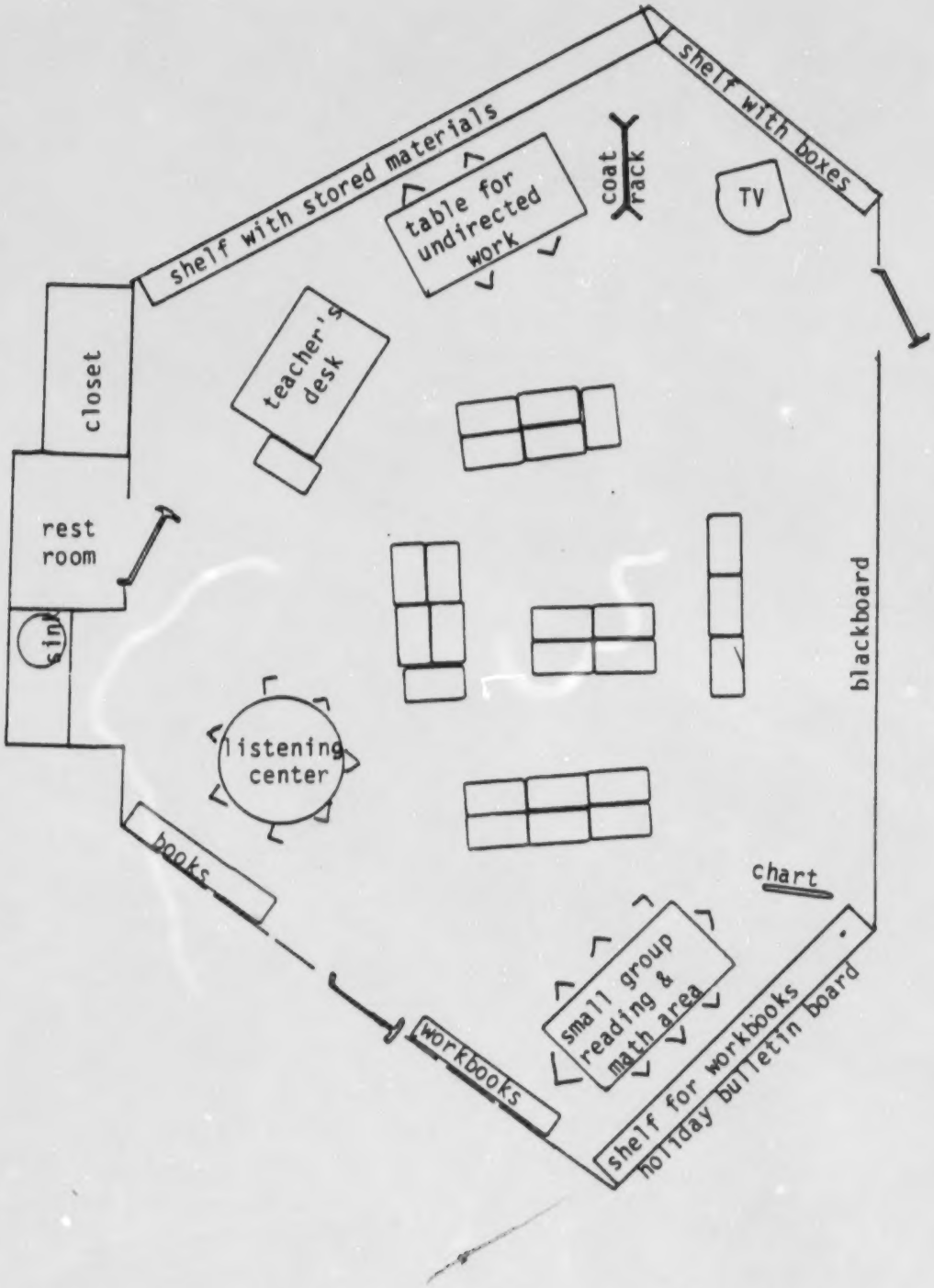
### A. The First Grade Settings

#### 1. Corpus Christi

In Corpus Christi, sample children were found in four of the city's sixty grammar schools. Each school was in a Mexican American neighborhood and the vast majority of the more than 600 students distributed from kindergarten through sixth grade at each school was of this ethnic group. Principals at three of the schools were Mexican Americans while a Black held that post at the fourth school. Mexican Americans held most of the administrative, instructional and custodial positions at all of the schools.

Although schools varied in architectural design, all served children in kindergarten through sixth grade and contained a playground area, a library, and a cafeteria/auditorium facility in addition to classrooms and administrative offices. The eight first grade classrooms containing sample children were similar in physical arrangement. As can be seen from Figure 3, children's desks were grouped in small clusters in the center of the room, with a second area used primarily for

Figure 3
Corpus Christi:
Typical First Grade Classroom

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teacher-directed small group activities, and a third organized for small groups of children to work alone.[1] Materials were stored in cabinets around the rooms and all classrooms contained the typical displays of the alphabet and numbers, children's work, and holiday decorations.

Although most of the average of twenty-five children in each classroom came from home environments in which Spanish was spoken, English was the predominant medium of instruction in all classrooms. More than 95% of all observed teacher verbal interactions with the sample children in all classrooms was in English. Six classrooms had a "bilingual program" in which the teacher used Spanish in conducting a language arts lesson on alternate days with the few largely monolingual Spanish children in each classroom.[2] During these periods the other children (including all of the sample children) in the classrooms would generally have a reading or math lesson to complete at their seats. Other activities were conducted in English and the Spanish-speaking children were generally addressed by the teacher in English. The children not receiving Spanish language arts were seldom observed to interact in either English or Spanish with the children participating in these activities.

All of the teachers in the bilingual classrooms as well as one other teacher were Mexican American women who spoke English and Spanish. The remaining four teachers were Anglo women who did not speak Spanish. Only two of the classrooms had aides present in the rooms, as aides at each school were generally provided per grade level to make materials for all classrooms.

The schools operated from 8:15 AM to 3:00 PM. Opening exercises consisting of the flag salute followed by a song, a review of the date, and the instructions for the day's activities began the school day in each classroom. These were carried out as a large group activity in which children volunteered answers or repeated in unison. A physical education period followed the opening activities. In all schools this period was taught by specialists and consisted of calisthenics and organized games which allowed the children little opportunity to converse among themselves. On the children's return to class after the thirty to forty minute exercise period, they engaged in language arts activities in a combination of small group and seat work. While one of the three reading groups in each class worked with the teacher, the other groups completed assignments at their seats. The groups were rotated so that each group worked with the teacher during this period. The activities in small groups were organized around the teacher making requests of individual children in a sequential manner. Children working at their desks often went to the teacher to ask questions but were discouraged from interacting among themselves. Lunch was the next period. Children were lead to the cafeteria where they had 30 minutes in which to eat. They were encouraged to complete their lunches in silence so as not to disturb nearby classes. Children were allowed to drink water and go to the bathroom before returning to class but did not have a recess period. The after-lunch class schedule consisted of math lessons conducted in a small group-seat work combination, a language arts activity, and social studies, science and art/music lessons

all conducted in large group. In bilingual classrooms on alternate days the Spanish language arts activity took the place of one of the latter three periods for Spanish monolingual children. Dismissal occurred in the last five minutes of the school day. The teachers handed out papers and called children up by rows to exit as the bell rang.

2. East Los Angeles

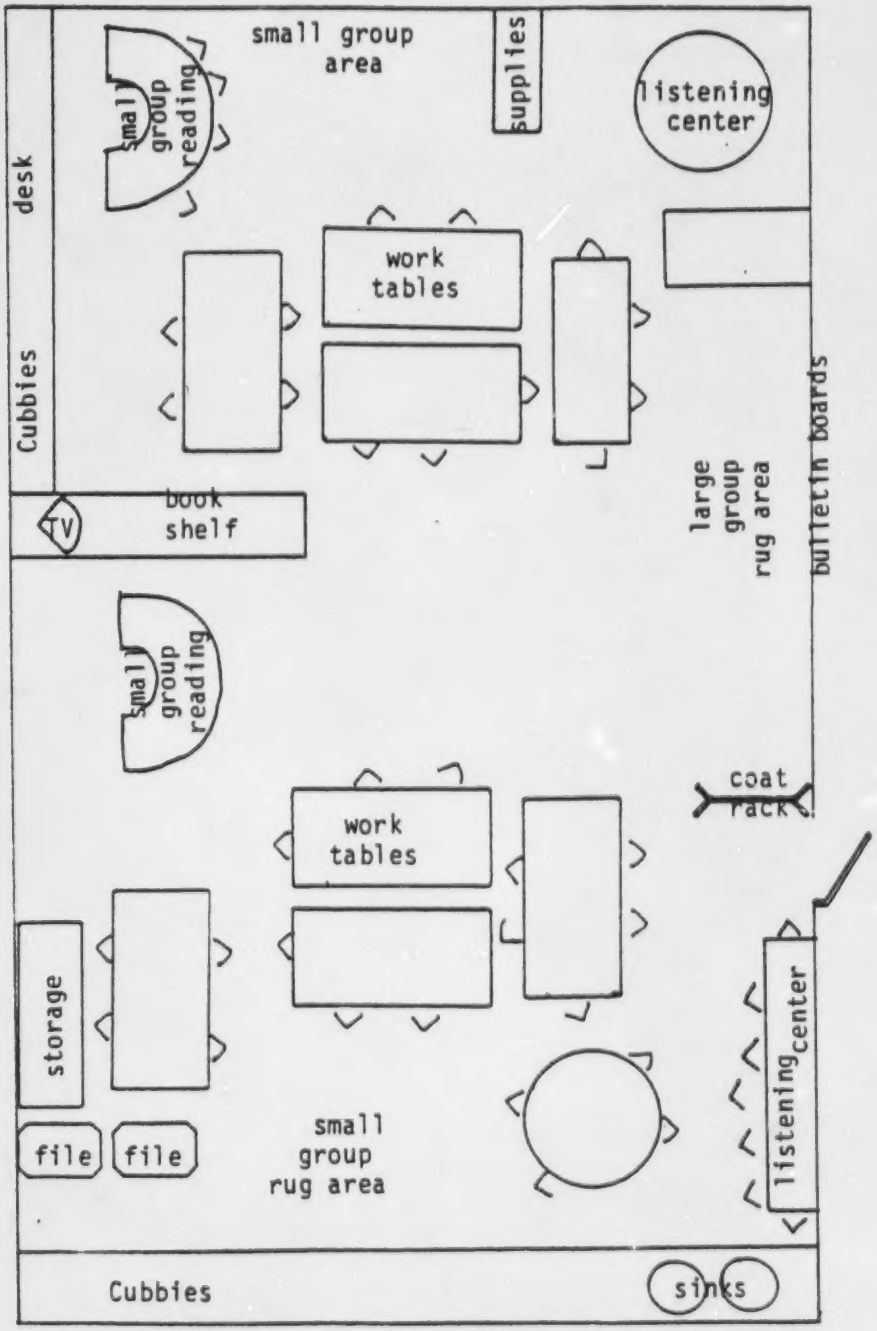
Sample children in East Los Angeles were found in a single elementary school. The school lay about six blocks from the two preschools attended by the sample children located in a predominantly Mexican American neighborhood of single family dwellings. Almost all of the nearly 800 students enrolled in kindergarten through fourth grade were Mexican American, as were the principal and support staff. About half of the instructional staff was Mexican American.

The school consisted of a main building of two stories which housed classrooms, administrative offices and the library, a number of permanent structures, and prefabricated bungalows containing classrooms, a cafeteria and two large playing areas. There were four first grade classrooms in the school. Three of these were combined classrooms with two teachers and approximately sixty students sharing space. Although viewed by the administration as single entities, common activities were limited to opening/roll call and a few large group activities. Each teacher in these classrooms identified as their children those with whom they worked throughout the day and the mode of instruction differed for each member of the teaching team. In each case, one of the teachers was a Mexican American who was bilingual in Spanish and English. These teachers' classes were made up of children of limited English proficiency, and language arts activites were conducted primarily in Spanish. Spanish made up between 35% and 80% of the total observed verbal interaction by the teachers in these classrooms. The second teacher in each of these classrooms was a monolingual English speaker who worked with bilingual and English monolingual children. In these classrooms more than 98% of the teachers' verbal interactions were in English.[3]

The fourth classroom had a single bilingual teacher who taught a classroom of approximately thirty limited English-speaking and bilingual children. Although English predominated in this classroom (at least 71% of the teacher's observed episodes with the sample children) lessons were conducted in both Spanish and English.

Classrooms differed from those at other sites in that, with one exception, children did not have assigned desks but rotated to different tables for various small group and seat work activities. Large group activities were generally conducted on a central rug area. Figure 4 shows the general lay-out of these classrooms. Also all classrooms at this site had a bilingual aide for at least half a day.

Figure 4
East Los Angeles:
Typical First Grade Classroom



These individuals participated in small group activities at one of the tables in addition to making materials.

The school day began at 8:15 AM and ended at 2:15 PM. In order to provide individual instruction in language arts, all of the classrooms followed a staggered schedule four days a week in which half of the children arrived at 8:15 AM and left at 1:15 PM and the other half arrived at 9:15 AM and left at 2:15 PM. The former group had language arts in small group during the first hour of class and the latter had it during the last hour of the afternoon. As at the other sites, children rotated by reading group for a session with the teacher and did assigned work during the remainder of the period. In contrast to other sites, however, children remained in their reading group and worked by themselves or with an aide at one of the tables when not with the teacher. This arrangement made conversations among children easier at this site than at the others, thus a greater number of communicative episodes resulting in communication sequences occurred here. Opening activities took place at 9:15 AM after the arrival of all the children. In all classes, this included roll call and a discussion of the day's activities. Classrooms varied, however, on the time devoted to review of the calendar and associated activities. Whatever the content involved, the activity was conducted as a large group with the children repeating and volunteering answers. A short recess of 15 minutes characterized by child-child interaction followed this period. On returning to class, children generally participated in mathematics activities. These began as a large group during which the teacher gave an explanation. Children then carried out their work in small groups. English was the primary language of instruction for this activity in five of the seven classes. The period following mathematics was normally devoted to physical education in which the teacher led the children in organized games or dance activities. Lunch followed. Children generally finished their lunches in ten minutes and spent most of the hour-long period at recess. The initial classroom activity in the afternoon (after a short quiet period in some classrooms) was normally a science, social studies or art activity conducted at the learning centers. A short dismissal followed for the early arrivals in which children returned work and materials to cubby holes, gathered belongings and lined up at the door to be dismissed by the teacher. Late arrivals then participated in language arts activities in small groups.

3. Rio Grande City

The three public elementary schools located within the city limits provided the sample children at this site. The schools ranged in size from 300 to 1,000 students. Two were located in residential neighborhoods while the third was part of a complex housing a variety of county offices, social service agencies and the city's junior and senior high schools. Consistent with the ethnic characteristics of the city in general almost all of the students, support staff, and teachers were Mexican American. Two of the three principals were Mexican American whereas the third was Anglo.

The two smaller schools were similar in terms of facilities. Both consisted of one main building housing offices and classrooms, a separate cafeteria, and portable buildings containing resource rooms and special programs. Each had a large area of open land which served as a playground and both were visited regularly by a bookmobile. The third consisted of a four-building complex of two story buildings. This complex, connected by covered walkways, contained classes of children from preschool to twelfth grade, school administrative offices, a library, and a cafeteria. The playground stretched the length of two football fields, however a small section adjacent to their classrooms was reserved for first graders.

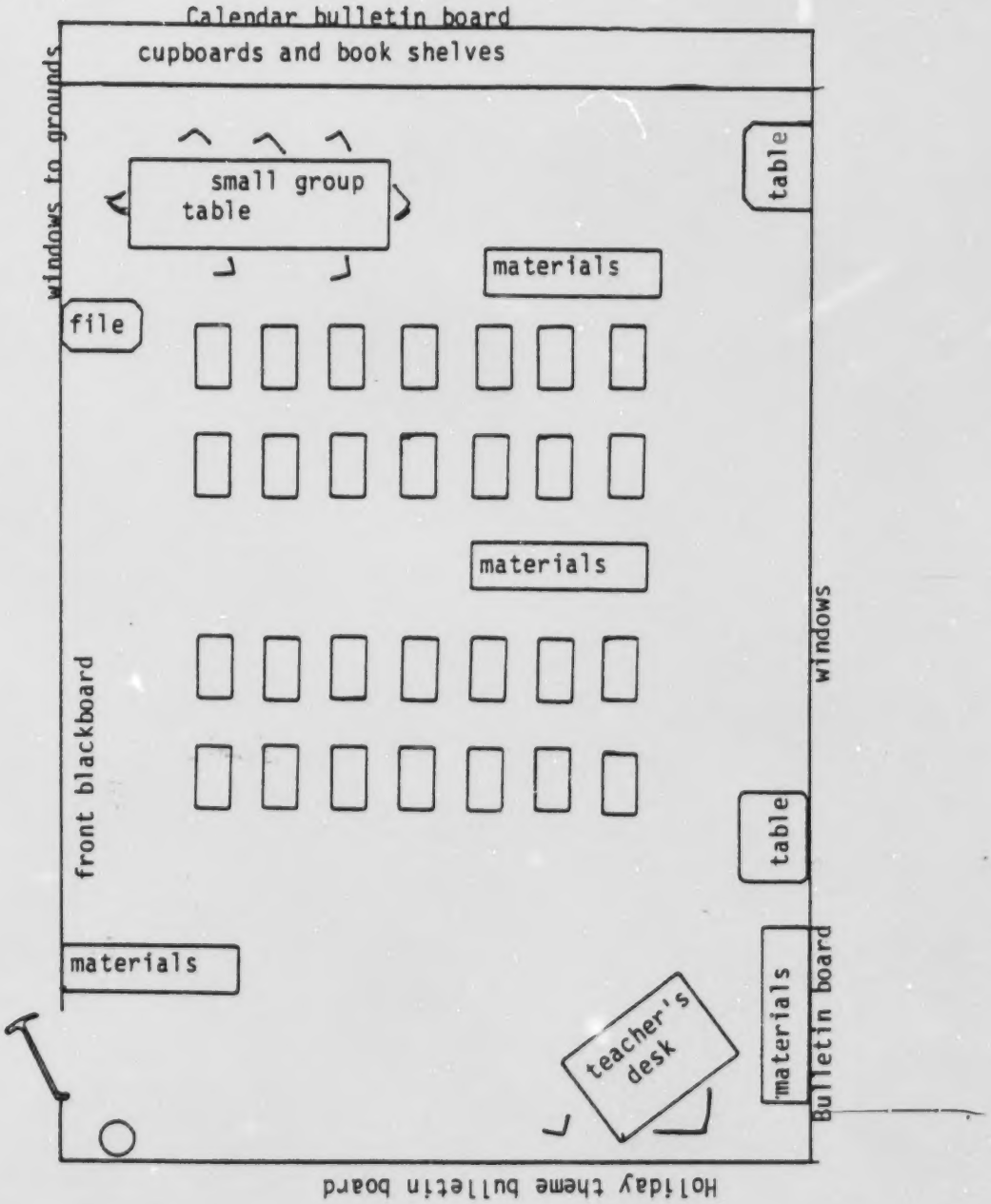
The arrangement of the six first grade classrooms in which sample children were found is shown in Figure 5. It differed from the other sites in that all had individual child-sized desks arranged in rows facing a front blackboard. One or two small tables located at the side or back of the room were used for small group activities.[4] Classrooms were small compared to those at other sites, allowing only about one foot of space between desks. Ample space for movement was, however, available on the sides of the room. All contained the usual variety of wall deocrations and materials.

Each of the classrooms ranged in number from 28 to 31 students. All but one was composed mainly of children of limited English proficiency and these children received instruction in both Spanish and English language arts. Teacher use of Spanish in these six classrooms ranged from 20% to 51%. The seventh classroom was composed largely of bilingual children and English was the language of instruction, with 96% of the teacher's verbal interactions being in that language.[5]

All of the teachers were bilingual Mexican American women. Each was assisted by an aide who was also bilingual. These women sometimes assisted during small group language arts lessons although their principal function was the preparation of materials.

The school day was from 8:30 AM to 2:45 PM at all Rio Grande City schools. Many of the children arrived early, however, to eat breakfast in the cafeteria. The day began with opening exercises consisting of the Pledge of Allegiance in English, singing of a patriotic song, roll call, and a review of the day's assignments. This period was followed by a small group reading activity in which the teacher worked at a table with small groups of six to nine children while others completed a written assignment. Teacher-child interaction was greatest during these periods, as most of the teachers went in a regular pattern around the table calling on individual children to read or answer. This morning small group session was an English language arts activity in all but one class where it focused on Spanish reading skills. A fifteen minute recess followed, and then the children returned to language arts, this time in large group. In all but the English classroom, this period of about 30 minutes was devoted to Spanish language development.

Figure 5
Rio Grande City:
Typical First Grade Classroom



Lunch period took place from 11:10 AM to 12:00 noon on a staggered schedule such that all first grades ate in the cafeteria and played on the playground at the same time. Lunch itself was usually over in about 20 minutes and the remaining 25 minutes were devoted to play. Owing to the long walk to and from the cafeteria at the largest school, the post-lunch play period was reduced to about 15 minutes.

The afternoon sessions at all schools were devoted primarily to math and social studies, science or art periods. Math was a combination of large group followed by seat work. In all but one classroom, the teacher used a mixture of Spanish and English to review the problems for the day. The activities following mathematics also combined large group explanations with individual seat work. Children often solicited help from each other or from the teachers during these periods.

All schools had an afternoon break for outside play around 2:00 PM. This was followed by a period for miscellaneous activities which included spelling quizzes, math review, group singing, film strips, or special announcements. Dismissal took place at 2:40 PM in the form of a brief clean-up in which children put away materials and gathered up belongings prior to being dismissed row by row.

## B. The Nature of the Communicative Episode

### 1. The Opening Move

#### a. Initiator

Consistent patterns in the initiation of a communicative episode were found across all classrooms. As can be seen from Table 5, regardless of the type of classroom or the English language proficiency of the children in a given type of classroom, a majority of the communicative episodes in which sample children were involved were initiated by someone else.[6] This finding is consistent with that for the Head Start sample. The relative frequency of other-initiated episodes is, however, consistently higher for the first grade sample, reflecting the greater emphasis on teacher-directed activities at this educational level.

As would be expected, the predominant mode for initiating a communicative episode was that which characterized the classroom language environment. EN children in English classrooms interacted verbally almost entirely in English. The majority of episodes involving both SP-1 and SP-2 children in English classrooms were also initiated in English. There was, however, a far greater tendency for SP-1 children to initiate episodes either in Spanish or nonverbally, reflecting their lesser degree of proficiency in their second language.

SP-1 children in bilingual classrooms showed a preference for initiating episodes in Spanish, although English was more likely to initiate an episode begun by someone else. The majority of SP-2

Table 6 : Target vs. Other - Initiated episodes by classroom type, mode and child language group.

| | CLASSROOM | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | English | | | | Bilingual | | | | Spanish | | | |
| | Fall | | Spring | | Fall | | Spring | | Fall | | Spring | |
| LANGUAGE GROUP | Other % | Target % | Other % | Target % | Other % | Target % | Other % | Target % | Other % | Target % | Other % | Target % |
| SP I | 63 | 37 | 61 | 39 | 57 | 43 | 63 | 37 | 62 | 38 | 58 | 42 |
| English | 90[1] | 64 | 83 | 65 | 52 | 29 | 47 | 36 | 32 | 16 | 39 | 14 |
| Spanish | 5 | 13 | 9 | 16 | 34 | 46 | 42 | 48 | 64 | 67 | 51 | 62 |
| SP II | 59 | 41 | 55 | 45 | 66 | 34 | 57 | 43 | 65 | 35 | 50 | 50 |
| English | 88 | 79 | 87 | 81 | 40 | 41 | 56 | 45 | 37 | 30 | 32 | 31 |
| Spanish | 5 | 8 | 4 | 9 | 43 | 38 | 39 | 43 | 59 | 62 | 54 | 5 |
| EN | 64 | 36 | 60 | 40 | 50 | 50 | 51 | 49 | | | | |
| English | 88 | 85 | 89 | 83 | 64 | 85 | 62 | 77 | | | | |
| Spanish | 1 | 1 | 0 | 0 | 27 | 7 | 33 | 14 | | | | |

[1] Percentages represent total number of other initiated strategies in English. Totals do not equal 100% owing to the number of episodes initiated nonverbally.

children in bilingual classrooms, despite being relatively proficient in English, also exhibited a slight tendency to initiate episodes in Spanish. As will be shown, this reflects their preference for their first language in certain contexts. English was the principal language of initiation for the single English-preferring child in a bilingual classroom. Almost a third of the communicative episodes directed to this child by others were, however, in Spanish.

Both SP-1 and SP-2 children in Spanish classrooms were exposed principally to episodes in Spanish. SP-2 children were, however, far more likely to use English or to be addressed in that language than were their less proficient counterparts in this type of classroom.

With the exception of SP-1 children in bilingual classrooms and the single EN child in the same classroom type, there was a relative increase in the target-initiated episodes from the fall to the spring observation period for all children. In the case of the SP-2 children, this would seem to be a result of an increasing willingness to initiate episodes in English, as the relative frequency of target-initiated episodes in that language increased across all classroom types. A similar tendency was exhibited by SP-1 children in English and bilingual classrooms despite the lower overall percentage of target-initiated episodes in the latter. The English-preferring child in the bilingual classroom exhibited a tendency in Spanish similar to that shown by his SP-1 counterparts in English. Among SP-1 children in Spanish classrooms and EN children, the relative frequency of verbal target-initiated episodes decreased slightly as these children tended to use more non-verbal interactions at the end of the year.

The context in which the episode took place greatly influenced the structure of the opening move. As shown in Table 7, the episodes occurring in the teacher-directed activities of small group, large group, and opening/dismissal were largely other-initiated. Close to 60% of the observed episodes in these contexts for all groups of sample children over the course of the year were initiated by someone other than the sample child.

The language used in each of these instructional contexts was reflective of the predominant classroom mode. (See Appendix C for information regarding language use by context.) English was the primary language used to initiate episodes in all three teacher-oriented contexts in English classrooms. Both languages were used to initiate communicative episodes in these contexts in the bilingual classrooms. Regardless of the English language proficiency of the children in the English and bilingual classrooms, English began the majority of both other-initiated and target-initiated episodes in the three contexts. There was, however, a greater tendency for SP-1 children to use their first language in the few instances in which they initiated communication, thus showing their continued reliance on Spanish for some interactions.

Table 7 : Target initiated vs. other initiated
Episodes by Context

| | | SP I CHILDREN | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Small Group | | Seat Work | | Large Group | | Recess | | Lunch | | Opening/ Dismissal | |
| | | O[1] | T[1] | O | T | O | T | O | T | O | T | O | T |
| CLASSROOMS | | % | % | % | % | % | % | % | % | % | % | % | % |
| English (N=8) | Fall | 78 | 22 | 48 | 52 | 83 | 17 | 53 | 47 | 32 | 68 | 76 | 24 |
| | Spring | 81 | 19 | 49 | 51 | 76 | 24 | 41 | 59 | 48 | 52 | 63 | 37 |
| Bilingual (N=7) | Fall | 74 | 26 | 37 | 63 | 73 | 32 | 52 | 48 | 50 | 50 | 75 | 25 |
| | Spring | 77 | 23 | 56 | 44 | 88 | 12 | 51 | 49 | 57 | 43 | 74 | 26 |
| Spanish (N=3) | Fall | 70 | 30 | 42 | 58 | 89 | 11 | 38 | 59 | 58 | 42 | 72 | 28 |
| | Spring | 58 | 42 | 47 | 53 | 83 | 17 | 62 | 41 | 38 | 62 | 66 | 34 |

[1] "O" designates other-initiated; "T" designates target-initiated.

Table 7 continued

SP II CHILDREN

| CLASSROOMS | | Small Group | | Seat Work | | Large Group | | Recess | | Lunch | | Opening/ Dismissal | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | O[1] | T[1] | C | T | O | T | O | T | O | T | O | T |
| | | % | % | % | % | % | % | % | % | % | % | % | % |
| (N=11) | English Fall | 74 | 26 | 45 | 55 | 71 | 29 | 49 | 51 | 53 | 47 | 68 | 32 |
| | Spring | 69 | 31 | 41 | 59 | 69 | 31 | 46 | 54 | 42 | 58 | 59 | 41 |
| (N=3) | Bilingual Fall | 64 | 36 | 40 | 60 | 85 | 15 | 39 | 61 | 52 | 48 | 53 | 47 |
| | Spring | 84 | 16 | 48 | 52 | 76 | 24 | 37 | 63 | 29 | 71 | 73 | 27 |
| (N=2) | Spanish Fall | 89 | 11 | 45 | 55 | 85 | 15 | 48 | 52 | 38 | 62 | 84 | 16 |
| | Spring | 46 | 54 | 40 | 60 | 82 | 18 | 36 | 64 | 38 | 62 | 81 | 19 |

[1] "O" designates other-initiated; "T" designates target-initiated.

Table 7 continued

| CLASSROOMS | | EN CHILDREN Small Group O[1] % | Small Group T[1] % | Seat Work O % | Seat Work T % | Large Group O % | Large Group T % | Recess O % | Recess T % | Lunch O % | Lunch T % | Opening/ Dismissal O % | Opening/ Dismissal T % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| English (N=7) | Fall | 78 | 22 | 48 | 52 | 85 | 15 | 46 | 54 | 48 | 52 | 88 | 12 |
| | Spring | 78 | 22 | 45 | 55 | 74 | 26 | 44 | 56 | 48 | 52 | 82 | 18 |
| Bilingual (N=1) | Fall | 70 | 30 | 30 | 70 | 56 | 46 | 50 | 50 | 50 | 50 | 27 | 73 |
| | Spring | 70 | 30 | 40 | 60 | 71 | 29 | 33 | 62 | 54 | 56 | 44 | 56 |

[1] "O" designates other-initiated; "T" designates target-initiated.

In Spanish classrooms, Spanish was the principal language for beginning both other-initiated and target-initiated communicative episodes in the teacher-directed small group context dealing primarily with reading skills. In the large group context, which included much of the mathematics and English as a Second Language instruction in these classrooms, English and Spanish were used relatively equally. There was, however, a tendency on the part of both SP-1 and SP-2 children in these classrooms to favor English over Spanish in the few episodes which they initiated during the large group context at the spring observation period. English predominated in other-initiated episodes during the opening/dismissal activities. Target-initiated episodes, however, were principally in Spanish for both groups of children in this context.

Unlike the activities occurring in the teacher-oriented contexts, those which took place in the more peer-oriented contexts of seat work, recess and lunch had a fairly even proportion of target- to other-initiated episodes. The small differences favoring target-initiated episodes in seat work were a result of the access all children had to the teacher as a speech partner, a situation which did not exist in the other peer-oriented contexts. English was the usual language used in the communicative episodes during seat work involving children of all language proficiency groups in English classrooms. Both English and Spanish were common in bilingual classrooms, with Spanish predominating among SP-1 children and English among SP-2's. Spanish was the mode used in the vast majority of both target-initiated and other-initiated episodes in Spanish classrooms.

In addition, the greatest frequency of episodes initiated nonverbally occurred in this context across all classroom types. The examples of Carlos and Jorge, two SP-1 children in bilingual classrooms, illustrate the structure of nonverbal target-initiated and other-initiated moves in this context.

> The teacher is in the aisle one over from Carlos. He stands and goes to her side. As she starts to continue on to the next child without seemingly noticing Carlos, he thrusts the papers he is holding forward. The teacher asks "Finished?" but Carlos has already turned on his heels and returned to his desk.
>
> Jorge is busily copying sentences from the blackboard. Alex leans over and points to a line in Jorge's notebook. Jorge responds in turn by leaning across the aisle and tugging lightly at Alex's hand. Alex bends over his work as if to hide his work.

In the first example, Carlos began the episode nonverbally by going to the teacher's side. When his nonverbal attempt for attention seemed unsuccessful, Carlos persisted and finally gained a verbal response from the teacher. The second communicative episode with Jorge, on the other

hand, was totally nonverbal. The frequency of nonverbally-initiated moves in episodes with peers during this context was often a result of classroom etiquette rules in many classrooms which encouraged silence during seat work.

The contextual variation in nonverbal strategies will be discussed fully in the subsequent section of this report.

In the recess and lunch contexts, the relative frequency of target-initiated episodes was also slightly greater in most classrooms. The general exception was the SP-1 children in bilingual classrooms where there was generally a slight favoring of other-initiated episodes. This would appear to be a result of the reticence by a number of children in these classrooms to engage in communicative episodes with their peers, especially early in the year. In both contexts, across all classroom types, the language used reflected that of the general classroom environment.

b. Speech Partner

As can be seen from Table 8, there was a tendency for all groups of children in each classroom type to increasingly interact with peers at the end of the year. In general, the relative frequency of interaction with adults was lower at the first grade level than in Head Start. This occurred despite the fact that all of the Head Start curriculum models were designed to encourage peer interaction. As the ratio of adult to peer interaction remained relatively high for the first three observation periods, it appears that the children were generally adult-oriented throughout their early educational experiences.[7]

The predominant mode of the episodes was consistent with the type of classroom in which children of different English language proficiencies were found. Differences were, however, evident in the language used with adults and peers in most classrooms. For both SP-1 and SP-2 children in English and bilingual classrooms the majority of the communicative episodes involving adults were in English. Similarly, a high percentage of the interactions of children in Spanish classrooms with adults also occurred in English, despite the predominance of Spanish in general in these classes. This is again consistent with the patterns found in Head Start when, even at the predominantly Spanish-speaking site of Rio Grande City, children showed a tendency to be involved in communicative episodes in English with the teacher. In both Head Start and first grade these were largely other-initiated episodes occurring in the teacher-directed small and large group contexts. With peers, however, the majority of interactions by SP-1 and SP-2 children in Spanish and bilingual classrooms were in Spanish. Similarly, greater percentages of the communicative episodes with peers by both groups in English classrooms took place in Spanish than did those involving adults.

The example which follows, taken from the observation of an English language lesson in a Spanish classroom, illustrates the tendency of

Table 8 : Speech partner by classroom type, mode, and language group.

SP I CHILDREN

| | ENGLISH CLASSROOMS | | BILINGUAL CLASSROOMS | | SPANISH CLASSROOMS | |
|---|---|---|---|---|---|---|
| | Fall | Spring | Fall | Spring | Fall | Spring |
| | % | % | % | % | % | % |
| ADULT | 59 | 51 | 52 | 46 | 53 | 41 |
| English | 91 | 91 | 57 | 57 | 35 | 48 |
| Spanish | 1 | 2 | 30 | 35 | 58 | 42 |
| Nonverbal | 8 | 7 | 13 | 8 | 7 | 10 |
| PEER | 34 | 44 | 40 | 46 | 39 | 50 |
| English | 65 | 60 | 23 | 29 | 15 | 16 |
| Spanish | 19 | 23 | 55 | 55 | 75 | 68 |
| Nonverbal | 16 | 17 | 22 | 16 | 10 | 16 |
| ONE/PARTICULAR | 7 | 5 | 7 | 8 | 8 | 9 |
| English | 66 | 81 | 55 | 54 | 20 | 28 |
| Spanish | 8 | 7 | 34 | 37 | 75 | 55 |
| Nonverbal | 26 | 11 | 11 | 9 | 5 | 17 |

Table 8 continued

SP II CHILDREN

| | ENGLISH CLASSROOMS | | BILINGUAL CLASSROOMS | | SPANISH CLASSROOMS | |
|---|---|---|---|---|---|---|
| | Fall | Spring | Fall | Spring | Fall | Spring |
| | % | % | % | % | % | % |
| ADULT | 57 | 46 | 49 | 38 | 53 | 34 |
| English | 87 | 89 | 53 | 68 | 49 | 42 |
| Spanish | 6 | 2 | 34 | 27 | 48 | 46 |
| Nonverbal | 7 | 8 | 13 | 5 | 3 | 12 |
| PEER | 33 | 46 | 42 | 57 | 40 | 53 |
| English | 80 | 81 | 34 | 36 | 22 | 22 |
| Spanish | 9 | 10 | 49 | 49 | 67 | 65 |
| Nonverbal | 11 | 9 | 17 | 15 | 10 | 13 |
| ONE/PARTICULAR | 10 | 8 | 10 | 5 | 8 | 13 |
| English | 83 | 80 | 44 | 55 | 18 | 44 |
| Spanish | 2 | 5 | 36 | 28 | 76 | 47 |
| Nonverbal | 15 | 15 | 20 | 17 | 7 | 8 |

Table 8 continued

EN CHILDREN

| | ENGLISH CLASSROOMS | | BILINGUAL CLASSROOMS | |
|---|---|---|---|---|
| | Fall | Spring | Fall | Spring |
| | % | % | % | % |
| ADULT | 52 | 44 | 43 | 45 |
| English | 89 | 86 | 71 | 72 |
| Spanish | 1 | 0 | 24 | 27 |
| Nonverbal | 10 | 14 | 5 | 0 |
| PEER | 41 | 48 | 37 | 38 |
| English | 87 | 89 | 70 | 63 |
| Spanish | 1 | 0 | 21 | 31 |
| Nonverbal | 12 | 11 | 9 | 6 |
| NO ONE/PARTICULAR | 7 | 8 | 20 | 17 |
| English | 77 | 72 | 92 | 73 |
| Spanish | 0 | 0 | 0 | 25 |
| Nonverbal | 23 | 28 | 8 | 2 |

Spanish-preferring children to make different language choices depending on their speech partner.

Alicia is sitting on the rug with a number of other children in a semicircle around the teacher. The children are using complete sentences to identify pictures on a stack of cards near the teacher.

Teacher: Alicia, please

Alicia: (Picks up a card with a picture of two ears) Dis is a ear.

Teacher: These are ears. Can you say that for me?

Alicia: Dese are ears.

Teacher: Because there are two of them.

Juan: (Picks up the next card -- it is upside down)

Alicia: Está al revés.

Juan: (Turns the card around)

Here, Alicia used the formulaic structure "dis is" to describe in English the picture card she had picked. When the teacher elicited repetition from her, emphasizing the plural form, Alicia repeated successfully and received feedback from the teacher in the form of an explanation on the correct form. Once the episode with the teacher was finished, however, Alicia immediately switched to Spanish when she turned her attention to Juan, her Spanish-preferring classmate. Her "teaching" in which she corrected her classmate on a procedural matter was in Spanish. Situations such as this were frequent across all classrooms.

Children of both groups across all classrooms also tended to engage in relatively more episodes with their peers which involved nonverbal opening moves. Similarly, the English-preferring child in the bilingual classroom tended to interact more nonverbally with peers than with adults. However, he spoke principally in English with both types of speech partners.

The vast majority of the communicative episodes involving English-preferring sample children in English classrooms occurred in English regardless of speech partner. These children had similar patterns of nonverbal interaction with both adults and peers.

As with the initiator of a communicative episode, context was important in determining the speech partner (Appendix C). Consistent patterns were found across all classroom types as to the principal speech partner of the sample children in given contexts. As would be expected, in teacher-directed small group activities, adults were the primary speech partner in almost all of the communicative episodes involving sample children, and as previously shown, the adults generally initiated the episode. In all but the Spanish classrooms, English was the principal mode used in this context. Bilingual classrooms had the greatest use of two languages.

The same pattern held true in the other teacher-directed activities of large group and opening/dismissal. In all classrooms the majority of the episodes during these contexts involved adults. These took place principally in English, even in those classrooms where Spanish in general predominated. English was the primary mode in episodes involving peers in these contexts for all children in English classrooms. In the few episodes involving peers in these contexts, however, SP-1 and SP-2 children in Spanish and bilingual classes tended to use Spanish.

Peers were the principal speech partners in the academic activities of seat work and the noninstructional contexts of recess and lunch. At least 60% of all episodes involving other individuals (i.e. excluding episodes initiated with no one in particular) took place with peers in each of these contexts. While the interactions with peers took place almost entirely in English for children of all language groups in English classes, SP-1 and SP-2 children in both bilingual and Spanish classrooms had a majority of their interactions in Spanish in these contexts. Seat work was found to be the context in which target children engaged most frequently in communicative episodes aimed at no one in particular. The majority of such episodes, which, as will be shown subsequently, usually involved strategies such as spontaneous repetition or talking to one's self while carrying out a task, matched the language most commonly used in each classroom type.

c. Function

The function of the communicative acts initiated with sample children differed somewhat by speech partner. Across all contexts the vast majority (87% to 91%) of adult-initiated communicative acts were requests. Although this was also the most frequent type of act used to initiate episodes by peers, it constituted only about 50% of the total in each case. Descriptions and conversational devices were also used frequently by peers, making up between 17% and 30% and 8% and 16% of the total respectively.

2. The Target Move

a. Strategies vs. Functions

Table 9 presents an overview of the target move. It shows the relative use of interaction strategies as opposed to functions of speech not involving such strategies for all sample children, by classroom type, mode, and language group. As can be seen, the target moves of the children, regardless of the classroom type or language proficiency, involved the use of strategies -- either verbal or nonverbal -- about 50% of the time.[8]

Differences among the classroom types and English language proficiency of the children are most evident when English language strategies and functions are examined. Several patterns emerge. In English and bilingual classrooms, the proportion of strategies to functions was

Table 9 : Summary of strategies and functions by classroom type, mode and language group.

| | English Classrooms | | | Bilingual Classrooms | | | Spanish Classrooms | | |
|---|---|---|---|---|---|---|---|---|---|
| | SP I | SP II | EN | SP I | SP II | EN | SP I | SP II | EN |
| | % | % | % | % | % | % | % | % | % |
| Total Communicative Acts | | | | | | | | | |
| Strategies | 49 | 48 | 48 | 50 | 50 | 56 | 49 | 55 | - |
| Functions | 51 | 52 | 52 | 50 | 50 | 44 | 51 | 45 | - |
| Total English Communicative Acts | | | | | | | | | |
| Strategies | 57 | 52 | 50 | 68 | 62 | 59 | 66 | 75 | - |
| Functions | 43 | 48 | 50 | 32 | 38 | 41 | 34 | 25 | - |
| Functions[1] | | | | | | | | | |
| English | 43 | 61 | 61 | 19 | 25 | 55 | 9 | 15 | - |
| Spanish | 10 | 6 | .5 | 43 | 39 | 20 | 52 | 52 | - |
| Nonverbal | 45 | 33 | 39 | 35 | 31 | 25 | 39 | 31 | - |
| Strategies[1] | | | | | | | | | |
| English | 61 | 68 | 66 | 39 | 41 | 59 | 17 | 38 | - |
| Spanish | 5 | 3 | .5 | 23 | 22 | 13 | 35 | 39 | - |
| Nonverbal | 33 | 28 | 33 | 35 | 36 | 27 | 45 | 21 | - |

[1] Percentages do not total 100% due to a language switching category not included here.

higher for children with less proficiency in English. For example, SP-1 children in English classrooms used relatively more strategies in their English speech than did SP-2 children. The SP-2 children, in turn, used a greater proportion of English strategies than their EN peers. This would be expected as the strategies were largely second language acquisition devices and many were either responses to situations of communication breakdown or ways of dealing with limited language proficiency. Obviously, such strategies would not be as appropriate when children were speaking in their first language.

A related pattern was that the percentage of English strategy use in relation to functions was greater as the environment of the classroom became less English oriented. That is, all children in Spanish and bilingual classrooms were more likely to employ a strategy when they used English than were children of the same language proficiencies in English classrooms. As has been previously shown, this was a result of those contexts where English was used in Spanish and bilingual classes being generally structured to require that a strategy be used, and that both SP-1 and SP-2 children in those classrooms tended to use Spanish in other contexts. For example, the overwhelming majority of English usage by children in Spanish classrooms occurred during adult-directed activities (in large group and opening/dismissal) in which strategies such as answering in unison, repetition, and formulaic expressions tended to be elicited by the teacher.

For those communicative acts not involving strategies, the language was that which predominated in general in the communicative episodes of the classroom. Functions achieved through the nonverbal mode generally accounted for about one-third of the total functions represented in the children's communicative acts. Slightly higher percentages of the nonverbal mode were found for the SP-1 children in English classrooms, whereas the EN child in a bilingual class had a slightly lower percentage of nonverbal interactions.

As might be expected, the majority of communicative acts in which no strategy was employed served the function of responses. These accounted for at least 60% of all functions for each group of sample children. This is not surprising in light of the fact that a majority of communicative episodes were other-initiated and that, consistent with the findings of others (Sinclair and Coulthard, 1975; Mehan, 1979), a large part of the classroom lessons was based on the teacher's questioning of students. The second most common function was that of requests, including action directives, questions soliciting information, and requests for permission. Approximately three-fourths of the children's interactions in which no strategies were involved were made up of these two types of functions. In the remainder of the communicative acts, children generally described or commented on some verifiable aspect of the classroom environment. Conversational devices and performatives represented only a very small percentage of total utterances.

Although all children followed the same general patterns, there were some differences in the language choice of children according to

English language proficiency. SP-1 children in all classrooms tended to use English more frequently in responses than for any other function. Despite the considerable amount of English input available in both English and bilingual classrooms, these same children made requests in Spanish. This reflects the fact that many of the requests were directed toward peers, with whom the SP-1 children tended to speak Spanish. Use of the nonverbal mode was confined primarily to responses and performatives for all children.

The predominant mode of the verbal strategies, like the mode of the functions, was reflective both of the principal classroom mode and the language proficiency of the children. In all English classrooms, at least 60% of the strategies were in English. The percentage of English use decreased across all language proficiency levels for bilingual and Spanish classrooms, with the SP-1 children consistently employing relatively fewer English strategies. Thus, although there was a greater tendency for Spanish-preferring children in Spanish and bilingual classrooms to use strategies in their communicative acts in English, these made up fewer of their total strategies owing to their relatively greater use of Spanish. The lack of interaction in Spanish by English-preferring children is shown by the extremely low percentage of strategies used in Spanish by that group. Only the lone EN boy in the bilingual class used some Spanish strategies to deal with the communicative demands of a bilingual classroom and engage in interaction with his Spanish-preferring classmates.

b. Use of Individual Strategies

Both the type of classroom and level of English language proficiency appeared to influence the relative frequency with which individual strategies were used. Classroom type seemed to determine the most frequently occurring English strategies, as similar general usage patterns for these strategies emerged for both SP-1 and SP-2 children in each classroom type. The English proficiency of the children, on the other hand, influenced the relative frequency with which less common strategies were used. Similarly, when individual contexts were examined, it was clear that both when a strategy was used, and the way in which it was employed depended on the language proficiency of the child.

The discussion that follows is organized into three parts. The first describes the use of strategies by children within a given classroom type. For each type of classroom, the general patterns in the use of the most common strategies begins the discussion. This is followed by a comparison of children of different language proficiencies within each classroom as to their use of the less commonly employed strategies. The second provides a brief description of the children's use of nonverbal strategies. The third examines the influence of context on the use of different strategies and the contextual variability in the use of strategies by children of different language proficiency.

(1) The Spanish Classrooms

As Table 10 illustrates, the patterns of English strategy use by SP-1 and SP-2 children were similar in terms of the three most common strategies: formulaic expressions, repetition, and verbal attention getters. The proportion of verbal attention getters and repetition were similar in all three classroom types, although as has been shown, the overall use of English in the Spanish classes was much less. Unlike either the bilingual or English classrooms, formulaic expressions accounted for at least 25% of all English verbal strategies. These generally occurred in a few teacher-directed contexts and at recess where these children were afforded the opportunity to practice their second language in the largely Spanish environment of the classrooms.

The predominance of formulaic expressions in the Spanish classrooms suggests that much of the SP-1 and SP-2 children's use of English in these classrooms did not go beyond certain set phrases. Their utterances could be prefabricated or formulaic in a number of ways. Some children consistently used set phrases which were peculiar to their own speech. This was especially evident when the memorized phrase was grammatically incorrect.

The case of Justin, an SP-2 child, illustrates such a usage. Justin freely substituted nouns with his formulaic verb "gots," as in the case below when he was leading the group in an English lotto game.

Teacher: Justin will be the leader. Justin you hold up the card and what do you say? (She holds up the ice cream card)

Justin: Ice cream

Teacher: Yes, you ask, 'Who has the ice cream?'

Justin: Who has the ice cream?

Teacher: (Hands him the box of cards, warning: I only want to hear English. (She leaves the table momentarily)

Myrna: (Reaches for a card.)

Justin: No, yo les voy a dar. (Passes out individual cards to the children and begins game:) Who gots the pencil?

Myrna: No lo tengo.

Justin: Who gots the towel?

Ricky: I do.

Teacher: (Returning to the table) No, you have to say, 'I have the towel.' Who has the towel?

Table 10: Comparison of individual strategies by classroom type and language group.

| VERBAL STRATEGIES | English Classrooms SP-I % | English Classrooms SP-II % | English Classrooms EN % | Bilingual Classrooms SP-I % | Bilingual Classrooms SP-II % | Bilingual Classrooms EN % | Spanish Classrooms SP-I % | Spanish Classrooms SP-II % |
|---|---|---|---|---|---|---|---|---|
| Literal Translation | 1[1] | 1 | - | - | - | - | 1 | 1 |
| Message Abandonment | 1 | - | - | 1 | 1 | 2 | 1 | 1 |
| Formulaic Expression | 9 | 9 | 10 | 13 | 9 | 13 | 31 | 25 |
| Repetition | 22 | 22 | 25 | 28 | 20 | 15 | 21 | 22 |
| Appeal for Assistance | 1 | 2 | 2 | 1 | 1 | 1 | - | - |
| Memorization | 9 | 7 | 9 | 12 | 17 | 1 | 7 | 7 |
| Monitoring | 2 | 3 | 1 | 2 | 2 | 2 | - | 2 |
| Talk to Self | 3 | 4 | 5 | 3 | 3 | 16 | 3 | 5 |
| One Word Answer | 1 | 1 | - | 1 | 1 | - | 4 | 2 |
| Elaboration | 6 | 14 | 11 | 5 | 7 | 14 | 7 | 9 |
| Clarification Request | 2 | 2 | 3 | 2 | 1 | 2 | - | - |
| Onomatopoeia | 7 | - | - | - | 2 | 2 | - | 2 |
| Story Telling | - | 2 | - | - | 1 | - | - | 1 |
| Role Plays | 1 | 1 | - | - | 1 | 3 | - | - |
| Changes Topic | - | 1 | - | - | - | 1 | - | 1 |
| Attention Getter | 16 | 15 | 13 | 9 | 15 | 13 | 12 | 9 |
| Answers in Unison | 10 | 7 | 7 | 12 | 11 | 3 | 3 | 8 |
| Anticipatory Answer | 2 | 1 | 8 | 3 | 2 | 2 | - | 2 |
| Reads Aloud to Self | 2 | 2 | 3 | - | - | 4 | - | 2 |
| Corrects/Teaches | 6 | 3 | 6 | 4 | 6 | 1 | 2 | 4 |
| Selective Memorization | 1 | 1 | 1 | 1 | - | - | 4 | 1 |
| Word Play | - | 1 | - | - | - | 1 | - | - |

[1]Totals may not equal 100 due to rounding.

Table 10 continued

| NONVERBAL STRATEGIES | English Classrooms | | | Bilingual Classrooms | | | Spanish Classrooms | |
|---|---|---|---|---|---|---|---|---|
| | SP-I % | SP-II % | EN % | SP-I % | SP-II % | EN % | SP-I % | SP-II % |
| Avoidance | 37 | 36 | 33 | 42 | 42 | 48 | 36 | 19 |
| Listening | 2 | 2 | 2 | 1 | 1 | 2 | 4 | 3 |
| Imitation | 5 | 3 | 4 | 5 | 2 | 1 | 2 | 6 |
| Mime | 4 | 6 | 5 | 7 | 5 | 8 | 3 | 6 |
| Identification | 7 | 12 | 6 | 9 | 13 | 13 | 10 | 22 |
| Demonstration | - | - | 1 | - | - | 2 | - | 1 |
| Attention Getter | 25 | 25 | 29 | 23 | 20 | 7 | 20 | 12 |
| Prefabricated Behavior | 3 | 3 | 5 | 1 | 4 | 2 | 5 | 3 |
| Writing | 7 | 5 | 8 | 6 | 3 | 3 | 9 | 2 |
| Checking/Copying Work | 2 | 1 | 1 | 2 | 1 | 3 | 6 | 2 |
| Self-Correcting | 2 | 1 | 1 | 2 | 1 | 2 | - | 1 |
| Mouthing | 4 | 3 | 4 | 3 | 5 | 5 | 4 | 2 |
| Correcting/Teaching | - | - | - | - | 1 | - | 1 | - |
| Anticipatory Answer | 2 | 1 | - | 1 | 2 | 3 | - | 1 |

Justin: Who has the skates?

Elena: I have the skates.

Justin: (Hands her the skate card and continues:) Who gots the blackboard?

Rene: I gots the blackboard.

Justin: Who gots the -- ¿cómo se dice cuchillo?

Despite the teacher's correction of his ungrammatical speech, Justin quickly reverted to his set verb -- gots -- in repeatedly asking his questions. Probably due to the constant repetition, his classmate incorporated the same form into his answer. This example also illustrates the tendency of children in the Spanish classrooms to return to Spanish to convey certain types of content.

The majority of the formulaic expressions used in the Spanish classrooms were, however, those commonly recognized in the literature (Wong-Fillmore, 1976). They included politeness formulas regularly used in the classroom, such as "good morning," "please," and "thank you." Still other expressions represented set pronoun/noun-verb structure such as "Dis is" into which could be substituted appropriate nouns. These were especially useful during teacher-directed group activities in which the response, usually a lexical item, could be filled in as needed. Others could be used to establish contact, such as "hey," and "teacher."

Differences between the SP-1's and SP-2's in the Spanish classrooms were apparent on an aggregate level and at the level of the less commonly occurring strategies. For the SP-1 children, a higher percentage of their strategies was concentrated in the top three strategies. The remainder of their strategy use, except for some elaboration, was principally with types of strategies which did not promote interaction -- such as memorization and one word answers.

Their SP-2 counterparts, on the other hand, used a greater number of strategies in their limited opportunities to practice their second language. They participated to a greater extent in group activities, as indicated by the frequency with which they answered in unison. They also demonstrated a greater attention to their own speech, as well as to that of adults and their peers in the classroom. This was shown by their use, although limited, of anticipatory answers, teaching/correcting activity, and monitoring of their own language production.

(2) <u>The Bilingual Classrooms</u>

Although the pattern of strategy use among children in the bilingual classrooms was not as consistent as that in the Spanish or English classrooms, there were a number of common trends. The strategy most frequently used by both SP-1 and SP-2 children in the bilingual classrooms was repetition, as was the case also in English classrooms. Memorization and answering in unison, however, were used relatively more

by these children than by their counterparts in other types of classrooms. This was consistent with the second language drills common in these classes. An observation of Reynaldo, made during a large group activity, illustrates the emphasis given to memorization in the bilingual classrooms.

(Reynaldo and the other children in the class face the teacher from their cluster of desks.)

Teacher: Where can you read numbers in our classroom?

Robert: On the ceiling

Teacher: Yes, we have numbers hanging from the ceiling. Those are the numbers of our centers in the afternoon.

Reynaldo: One, two, three, four, five (counting the numbers softly)

Teacher: One potato, two potato . . .

Reynaldo: (Repeats after the teacher up to:) Seven potato

Teacher: (Tells the children to do it with a partner, then leads them in three more renditions of the drill)

When differences within the bilingual classrooms were examined by language group, it was found that SP-2 children, as was the case with children of similar language proficiency in the Spanish classrooms, used a greater range of strategies. In addition, these children used verbal attention getters in English more frequently than did the SP-1 children in the same types of classrooms. This is consistent with the finding presented earlier that these children initiated more communicative episodes than did their SP-1 peers. Formulaic expressions were only the fifth most frequently used strategy by SP-2 children in the bilingual classrooms, while ranking first among similar children in the Spanish classrooms. This strategy remained a very common strategy for SP-1 children, ranking second in frequency of use. It was, however, less important than for similar children in Spanish classrooms where it ranked first.

The lone English-preferring child in the bilingual classroom differed considerably from his Spanish-preferring peers in his use of strategies. This reflected both his advanced English language proficiency and certain individual characteristics. Talking to oneself was his most common English strategy. In the case of this child, the strategy represented an idiosyncratic habit. During the fall of the year, he frequently talked aloud to himself. This was not only a way to monitor himself as he solved problems, a frequent strategy employed by many of the children, but also included elaborate role playing in which he played two characters who engaged in conversation. The importance of the strategy was evident in the fact that he also frequently engaged in such behavior in his second language -- Spanish.

A very verbal child, he frequently tended to elaborate both on his own and in response to the teacher's statements, in a verbal attention getting device.

(3) The English Classrooms

The most common strategies used among all the children in the English classrooms, like those in the Spanish classrooms, were strikingly similar. For SP-1, SP-2, and EN children, verbal attention getters and repetition ranked as the top two strategies. As pointed out earlier, peer interaction in English was more common in the English classrooms for children of all English language proficiency levels. It is not surprising, therefore, that verbal attention getters should account for a somewhat higher average proportion of strategies for children of all language proficiency levels in these classrooms than in any other classroom type.

Although repetition was a common strategy across all classroom types, the repetition used in the English classrooms generally took a greater variety of forms and functions. Structurally, repetition could be of two types: repetition of the speech of another or of one's own speech. In all classroom types, during large and small group exercises focused on the development of reading skills, children frequently repeated sounds and words pictured on a flashcard or modelled by the teachers. Even when the teacher did not specifically elicit repetition, many children, accustomed to the routine of the exercise, repeated automatically.

In other cases, the children spontaneously repeated all or part of an utterance of another. Often, this appeared to be a conscious language practice strategy consisting of echoing a vocabulary item or a word form as if trying to etch it into memory. Use of this type of repetition was often typical of a few children in each classroom. At other times, the repetition of another's utterance took the form of incorporation of a word, topic, or structure into the child's speech. This usually served to lengthen the communicative sequence, linking the child's turn to the previous turn and extending the conversation around a single word.

When children repeated their own utterances, its function was also usually discoursal. Often they utilized this form of repetition to attempt to begin an episode, maintain a turn, or for emphasis. The case of Ivette, an SP-1 child in an English classroom, serves to exemplify the different ways in which repetition was used by the children.

Unsolicited Repetition:

(Ivette sits in a small group English session, reading from a preprimer)

Aide: Ivette

Ivette: Where, where is the girl? (Pointing to each word) What dues-

Aide: What word is that?

Terry: Does

Ivette: Does (And continues reading)
Who is that girl?

Echoing:

(Ivette is in English reading group with the teacher and seven other children)

Teacher: (Correcting the reading of another child:)
Are

Ivette: Are

Incorporation:

(Lily and Ivette are role playing as they carry small cat puppets made of tongue depressors and colored paper which they have constructed for a Halloween art project)

Lily: It's Halloween. What ya' gonna be?

Ivette: A cat

Lily: I'm gonna be a ____ . . .

Ivette: Where's your ____?

Lily: Mine is in the _____.

Ivette: Mine is in the house.

Self-repetition:

(Ivette is trying to interrupt the teacher who works with another child)

Ivette: Miss, I get an A? I get an A, Miss? I get an A?

. . . . . .

(Ivette goes to the teacher who stands at the side of the room to hand in an assignment)

Ivette: Miss, I turn this in?

Teacher: You finished?

Ivette: I turn this in?

Teacher: (Reminds her to do the back side of the task)

Teacher-elicited repetition and spontaneous repetition of one's own utterance for emphasis or to initiate an interaction were strategies common to children in all classrooms.

In the English classrooms, differences in the use of strategies among children of different English language proficiency were less evident than in the other classroom types. The frequency with which

three less common strategies -- elaboration, answering in unison, and anticipatory answers -- were used tended to distinguish the children. Elaboration was the third most commonly used strategy by English preferring and SP-2 children, but ranked only fifth for SP-1 children. This suggests that the primarily English language environment of the classroom provided greater opportunity for children of more advanced language proficiency to expand their practice with English. Answering in unison ranked third among SP-1 children and fifth among SP-2 children. The frequency of answering in unison by the less proficient children indicated their willingness to participate and practice English in the large group activities, as was the case of the SP-2 children in Spanish classrooms. The English-preferring children in the English classrooms anticipated the questions and statements of others more frequently than any other group of children. This suggests that the interpretation of classroom cues which permit a judgment about the content of an individual's next communicative act may require a relatively high degree of proficiency in the target language.

(4) Nonverbal Strategies

Of the nonverbal strategies, avoidance, nonverbal attention getting, mime, identification, and copying letters/writing were engaged in most frequently. The consistent patterns found among all language groups within a classroom for verbal strategies were not evident for nonverbal strategies. Instead, the most consistent trends occurred among children having similar English language proficiency. The nonverbal strategies used by SP-1 children were more often of the kind which did not extend communicative episodes than were those of other children. Avoidance generally represented a higher proportion of the nonverbal strategies for these children than for SP-2 or EN children. That is, when presented with an opportunity to interact verbally these children often rejected it through either remaining silent or shrugging their shoulders. In addition, many of the nonverbal strategies used by the SP-1 children were passive responses to the input of others, such as copying from the board per the teacher's instructions.

For the SP-2 children, on the other hand, more active nonverbal strategies such as identification and mime were more common. Identification, in which children pointed to a concrete object, represented at least 12% of total nonverbal strategies. Unlike the strategies used by the less proficient children, the use of this strategy was often accompanied by a verbal strategy to reinforce a message being transferred and did not, as in the case of avoidance, discourage the occurrence of further interaction. With the exception of SP-2 children in the Spanish classrooms and the lone English-preferring boy in a bilingual class, all children used nonverbal attention getters with roughly the same relative frequency.

(5) Strategy Use by Context

The verbal strategies most commonly employed in the classroom in general -- repetition, verbal attention getters, formulaic expressions, elaboration, memorization and answering in unison -- were found in all six contexts. Certain contexts were, however, typified by one or more of the commonly occurring strategies and, at times, by a number of the less common ones. This section discusses the strategies typical of each context and examines the differential use made of these strategies by children of different language proficiencies. (See Appendix D for all strategies used by individual children.)

Teacher-oriented contexts. As has been previously shown, the content of most small group activities dealt with the development of reading skills. Thus, as shown in Table 11, strategies such as repetition and answering in unison as responses to lessons focusing on the form of language were common in this context. Similarly, as teachers used questions to stimulate students' use of varied structures and lexical items, elaboration was relatively common in this context. Monitoring, when observed, generally occurred during small group sessions.

Answering in unison and repetition were also characteristic of large group and opening/dismissal contexts in which the teacher, standing at the front of the room, elicited responses from children. As opening/dismissal was made up of highly routinized activities such as recitation of the Pledge of Allegiance and the singing of patriotic songs, memorization was also a commonly used strategy in this context. In the case of the SP-1 children, this was often the selective memorization of certain stressed words or phrases.

Typical of the interactions in activities occurring in the adult-directed contexts are the following episodes involving Raimundo during opening in a bilingual classroom.

(After reciting the Pledge of Allegiance and singing America, the teacher begins the daily calendar exercise standing by the side bulletin board featuring time and season concepts)

Teacher: ¿Cúales son los días de la semana?

Raimundo: (Recited rhythmically, in unison with others) Domingo, lunes, martes, miércoles, jueves, viernes, y sábado

Teacher: How many days are there in a week?

Raimundo: (With others) Seven

Teacher: How many days do we go to school?

Raimundo: (With others) Five

Teacher: What are the days we go to school?

Table 11: Principal strategies by context.

| CLASSROOM | Repetition/ Incorporation | | | Formulaic Expressions | | | Attention Getters | | | Elaboration | | | Memorization | | | Answers in Unison | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | SP I | SPII | EN | SP I | SPII | EN | SPI | SPII | EN | SPI | SPII | EN | SP I | SPII | EN | SPI | SPII | EN |
| | % | % | % | % | % | % | % | % | % | % | % | % | % | % | % | % | % | % |
| English | | | | | | | | | | | | | | | | | | |
| Small Group | 32[1] | 27 | 28 | 3 | 6 | 3 | 9 | 14 | 14 | 9 | 12 | 11 | 4 | 8 | 8 | 11 | 7 | 4 |
| Large Group | 25 | 17 | 24 | 3 | 4 | 3 | 9 | 16 | 8 | 7 | 13 | 4 | 10 | 1 | 12 | 19 | 14 | 23 |
| Open/Dismiss | 20 | 16 | 24 | 12 | 13 | 3 | 13 | 17 | 7 | 2 | 11 | 1 | 14 | 14 | 31 | 16 | 11 | 28 |
| Seat Work | 19 | 19 | 23 | 13 | 9 | 7 | 27 | 16 | 16 | 5 | 15 | 11 | 6 | 6 | 6 | 1 | 0 | 0 |
| Recess | 15 | 25 | 29 | 27 | 26 | 28 | 13 | 6 | 11 | 3 | 12 | 12 | 15 | 9 | 5 | 4 | 5 | 1 |
| Lunch | 23 | 31 | 19 | 14 | 9 | 18 | 37 | 13 | 18 | 7 | 11 | 26 | 2 | 2 | 0 | 0 | 2 | 0 |
| Bilingual | | | | | | | | | | | | | | | | | | |
| Small Group | 31 | 45 | 20 | 15 | 1 | 3 | 4 | 8 | 11 | 10 | 2 | 23 | 4 | 5 | 0 | 11 | 16 | 6 |
| Large Group | 19 | 16 | 10 | 9 | 11 | 39 | 8 | 7 | 17 | 6 | 5 | 3 | 11 | 17 | 0 | 28 | 21 | 10 |
| Open/Dismiss | 11 | 14 | 16 | 16 | 7 | 21 | 23 | 17 | 4 | 1 | 7 | 13 | 25 | 17 | 8 | 7 | 16 | 0 |
| Seat Work | 22 | 13 | 10 | 14 | 8 | 12 | 17 | 27 | 17 | 3 | 9 | 16 | 20 | 20 | 0 | 0 | 1 | 0 |
| Recess | 30 | 11 | 22 | 42 | 28 | 11 | 4 | 25 | 15 | 2 | 11 | 9 | 10 | 14 | 4 | 0 | 3 | 0 |
| Lunch | 29 | 25 | 14 | 29 | 25 | 24 | 6 | 25 | 0 | 0 | 17 | 0 | 17 | 0 | 0 | 6 | 0 | 0 |
| Spanish | | | | | | | | | | | | | | | | | | |
| Small Group | 18 | 21 | 0 | 32 | 16 | 0 | 9 | 12 | 0 | 14 | 21 | 0 | 0 | 3 | 0 | 4 | 6 | 0 |
| Large Group | 35 | 25 | 0 | 5 | 4 | 0 | 0 | 4 | 0 | 0 | 16 | 0 | 15 | 8 | 0 | 15 | 21 | 0 |
| Open/Dismiss | 7 | 22 | 0 | 50 | 9 | 0 | 7 | 0 | 0 | 7 | 0 | 0 | 7 | 19 | 0 | 0 | 31 | 0 |
| Seat Work | 25 | 13 | 0 | 20 | 30 | 0 | 20 | 16 | 0 | 10 | 2 | 0 | 15 | 7 | 0 | 0 | 3 | 0 |
| Recess | 7 | 29 | 0 | 40 | 46 | 0 | 27 | 7 | 0 | 27 | 7 | 0 | 7 | 0 | 0 | 0 | 2 | 0 |
| Lunch | 25 | 17 | 0 | 62 | 40 | 0 | 13 | 11 | 0 | 13 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

[1] Represents the relative frequency of a particular strategy compared to all strategies used in a given context.

Raimundo: (In unison)
Monday, Tuesday, Wednesday, Thursday, Friday,
(And then with two or three others)
Saturday

Teacher: (Catching the error)
No, not Saturday. Who said Saturday?

Raimundo: (Looks on only as someone accuses a boy in the back of the room of having said it)

(Calendar exercise continues:)

Teacher: Cũales meses vamos a la escuela?

Raimundo: (Recites sequence of months in Spanish, beginning with 'agosto.' When he starts to say 'junio,' he stops in mid-word, realizing that his peers have stopped appropriately at 'mayo.')

Here, Raimundo, a Spanish-preferring boy with straight medium length hair, used both a memorization strategy and answering in unison. The form of presentation and content of the questions asked by the teacher elicited these two strategies. The questions asked by the teacher were aimed at reviewing and drilling already known concepts and required only one word answers or series of answers. The teacher was eliciting responses from all of the children rather than an individual. As was typical of the large group activities and opening/dismissal, the teacher only responded directly in the form of an evaluative feedback move when she noticed Raimundo's "incorrect" answer. Otherwise all other response moves in the sequence were in the form of an additional question.

Unlike some children who consistently failed to respond in activities such as these since their lack of participation would not be noticed,[9] Raimundo took advantage of the context to practice both his first and second language. Raimundo was able to answer the first question appropriately by reciting the days of the week in an even mechanical tone typical of a memorized sequence. He continued the well-rehearsed routine correctly answering in unison the next two questions in English. Rather than listening closely to the teacher's next question, however, he resorted to mechanically reciting the days of the week in English. Although his memorization strategy on this item caused him to give an incorrect answer, his behavior later in Spanish illustrated one of the 'benefits' of his answering in unison. When Raimundo began to make the same error in Spanish, automatically reciting the months in Spanish in a memorized sequence, he attended to the answers of his peers around him and stopped in mid-word.

The large group context also encouraged the use of certain nonverbal strategies. Avoidance generally occurred more frequently in large group activities than in those of small group. In large group, the teachers' attention was disseminated over many children so that children could more easily avoid answering questions. In the small group sessions, however, teachers discouraged nonresponse by repeated questioning of the

same child. For the same reason, the use of nonverbal attention getters such as hand raising was relatively more frequent in large group than in small group situations.

Peer-oriented contexts. As with the adult-oriented contexts, certain strategies characterized each of the contexts of seat work, recess, and lunch. Formulaic expressions, for example, were the most common strategy during recess. This might be expected as in this context children were involved in games each of which had its own specialized vocabulary and almost ritualistic interaction standards. The following example of Ernesto, a SP-2 boy in a Spanish classroom, who outside of the recess context interacted with peers primarily in Spanish, typifies this tendency.

(Ernesto stands in the sand area near the parking lot watching a marble game along with a number of other boys)

Jimmy: (To Meme)
Play you, Meme.

Meme: (Shakes his head no)

Ernesto: Play you, Meme.

Meme: OK

Jimmy: Play you, Meme.

Meme: (Shakes his head no)

Jimmy: You gonna play him? (Moving his head in the direction of Ernesto)

(Ernesto and Meme separate themselves slightly from the group and say simultaneously:)
First

Meme: I said it first.

Ernesto: (Nods his head in agreement)
No changies.

Meme: I don't wanna play. (He walks off)

Ernesto: (Looks after him, then shrugs)

Formulaic expressions were also common during lunch. This was especially true for SP-1 children in Spanish classrooms who often found themselves at a table with English-preferring peers and used primarily formulaic expressions in their interactions with these children. Repetition in the form of incorporation of a topic or structure was also a common strategy in the lunch context.

Verbal attention getters were characteristic of the seat work context. As previously shown, in this context children worked on individual tasks, and in order to carry out a communicative episode it was often necessary to attract the attention of an intended speech partner. The

following example of Marcela, in which the child resorts to a number of different attention getters to gain access to her peers, represents a case of unusual persistence in the use of this strategy.

(Marcela is seated at her desk, and attempts to interrupt the conversation of Lupe, who sits in front of her and Vickie, situated in the next row)

Marcela: LUPE, Lupe

Lupe: (No response)

Marcela: Lupe, come here. (She then whistles loudly)

Lupe: (Turns around in her desk)

Marcela: Did you miss some?

Lupe: (No response)

Marcela: Vickie, Vickie

Vickie: (No response)

Marcela: Viquita, look what I did. I was gonna take the page out. (Holds up her writing assignment which she had crumpled into a ball earlier) Vickie, Viquita

Vickie: Huh?

Marcela's repertoire of verbal attention getters is impressive here. When increased volume, repetition of Lupe's name, and a direct command are not successful, she uses the paralinguistic device of whistling, which is successful. Finally, she adds the dimunitive form to gain Vickie's attention.

The seat work context was also that in which less commonly occurring strategies such as appeal for assistance and talking to oneself usually occurred. Children would solicit assistance from either the teacher or their peers in completing a task for which there was a "correct answer." The individual work typical of the seat work context also encouraged the strategy of talking to oneself while carrying out the problem-solving involved in a task. Children, for example, were observed to count to themselves as they solved math problems and repeat the sounds and names of letters as they copied from the board. These types of strategies, when accompanied by a response from a speech partner, made up many of the communicative episodes initiated to no one in particular which were discussed in an earlier section of this report. An observation of Lea, a SP-2 child in an English classroom highlights a number of the strategies used in the activities related to seat work.

(Lea sits at a small table with four other children, all of whom are working on a mimeographed math assignment)

Lea: (Counts on her fingers to herself as she solves the problem, then, seeing Carol, two

seats away, flip through the sheets of problems, comments:)
I know how to do that. (Pointing to a problem)

Carol: (Gives no response, and turns the page)

Lea: (Looks at another problem)
That's gonna be hard.

Carol: (Gives no response and begins working)

Lea: (Resuming work, counts on her fingers and remarks:)
I'm getting all messed up.

Laura: (Girl next to her)
Three plus five (To help Lea out)

Lea: NO, I know how.

Laura: (Resumes work)

Here, Lea, who frequently talked to herself, is unsuccessful twice in attempting to establish contact with her classmate Carol. Her remark to herself (i.e. to no one in particular), however, serves to attract the attention of Laura, who spontaneously offers her assistance in solving the problem. Unintended initiations of episodes such as this were common.

The context of seat work was that in which the highest percentage of nonverbal strategies occurred. Nonverbal attention getters, like verbal ones, were a common strategy during this context. Children frequently tapped on each other's shoulders or used their pencils to attract their neighbor's attention. This was especially true of children in classrooms where the seating arrangement of individual rowed desks forced children to lean across the aisle or turn around to establish contact. Identification was another nonverbal strategy which characterized seat work. This strategy often occurred in conjunction with verbalization as children, in describing or explaining the task at hand, frequently resorted to pointing to their work.

(6) Contextual Variations by Language Group

Although certain strategies tended to characterize contexts, the relative frequency of individual strategies and the way in which certain strategies were used differed by the language proficiency of the children. English-preferring children used the majority of their English strategies during the contexts of seat work, recess, and lunch. Spanish-preferring children, on the other hand, employed English strategies primarily during small group, large group, and opening/dismissal. This suggests that as children gain greater proficiency in a language they are better able to structure their own language learning strategies. Further support for this supposition is provided by a comparison of the SP-1 and SP-2 children in the sample. When the relative frequencies of use of individual strategies were compared by context, SP-2 children

consistently used a greater proportion of all strategies in the non-teacher directed contexts than did SP-1 children. Also, even within the same contexts, these children used a number of the more common strategies for different purposes than did their SP-1 counterparts. This was especially evident with formulaic expressions, repetition, and elaboration. For SP-1 children in the Spanish and bilingual classrooms, routine expressions served primarily as responses to teachers' questions. Frequently, these expressions were used as a means of dealing with requests in teacher-directed activities. SP-2 children, on the other hand, tended to use these strategies for the more interactional purposes of initiating and sustaining communicative episodes, especially with peers.

3. The Response Move

For all language groups across all classrooms similar trends were found in terms of the response move. For most children,[10] a majority of episodes consisted of a total of two communicative acts and, therefore, did not result in communicative sequences. The frequency of communicative sequences remained relatively consistent over time, varying a maximum of five percentage points from the first to the second observation period. Although the ratio of sequences to nonsequences stayed relatively stable over the year, there was a general increase in the average number of communicative acts by the target child in communicative sequences from fall to spring. This suggests that when feedback was provided, the children were becoming more adept at sustaining conversations at the end of the year.

Contextual differences related to the response move were not as apparent as with the other moves making up a communicative episode. As illustrated in Table 12 , across all classrooms the majority of episodes in the teacher-directed small group context resulted in sequences. This was consistent with the type of activities that occurred in that context. These activities, related to reading or answering questions about a story, were generally initiated by the adult through a request, to which the child responded and the adult provided feedback or made an additional request related to the same topic. Thus, they were structured to be what we have called a communicative sequence. In the episodes not resulting in a communicative sequence, feedback on performance was generally not provided. The following observations of Doris in this context exemplify these types of communicative episodes.

Sequence:

(Doris is at the rectangular table with the teacher and the other five members of her reading group. The teacher holds up the letter 'V' and asks for its sound)

Doris: [və]

Teacher: What is this letter, Doris? (Holds up a 'D')

Doris: [də]

Teacher: (Asks Doris to repeat)

Table 12: Relative frequency of sequences vs. nonsequences by context

(SP I CHILDREN)

| CLASSROOM | | Small Group | | Seat Work | | Large Group | | Recess | | Lunch | | Opening/ Dismissal | | All Contexts | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | S | NS | S | NS | S | NS | S | NS | S | NS | S | NS | S | NS |
| | | % | % | % | % | % | % | % | % | % | % | % | % | % | % |
| English Classrooms (N=8) | Fall | 54 | 46 | 41 | 59 | 45 | 55 | 40 | 60 | 33 | 67 | 36 | 64 | 43 | 57 |
| | Spring | 56 | 44 | 36 | 64 | 38 | 62 | 34 | 66 | 34 | 66 | 40 | 60 | 39 | 61 |
| Bilingual Classrooms (N=7) | Fall | 71 | 29 | 44 | 56 | 49 | 51 | 34 | 66 | 46 | 54 | 38 | 62 | 46 | 54 |
| | Spring | 58 | 52 | 40 | 60 | 51 | 49 | 34 | 66 | 60 | 40 | 39 | 61 | 46 | 54 |
| Spanish Classrooms (N=3) | Fall | 52 | 48 | 35 | 65 | 61 | 39 | 44 | 56 | 25 | 75 | 28 | 72 | 44 | 56 |
| | Spring | 70 | 30 | 44 | 56 | 53 | 47 | 51 | 49 | 59 | 41 | 26 | 74 | 49 | 51 |

[1] "S" designates sequences; "NS" designates nonsequences.

Table 12 continued

(SP II CHILDREN)

| CLASSROOM | | Small Group S % | Small Group NS % | Seat Work S % | Seat Work NS % | Large Group S % | Large Group NS % | Recess S % | Recess NS % | Lunch S % | Lunch NS % | Opening/ Dismissal S % | Opening/ Dismissal NS % | All Contexts S % | All Contexts NS % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| English Classrooms (N=11) | Fall | 53 | 47 | 36 | 64 | 43 | 57 | 42 | 58 | 35 | 65 | 34 | 66 | 42 | 58 |
| | Spring | 50 | 50 | 44 | 56 | 42 | 58 | 43 | 57 | 43 | 57 | 32 | 68 | 43 | 57 |
| Bilingual Classrooms (N=3) | Fall | 50 | 50 | 34 | 66 | 58 | 42 | 42 | 58 | 30 | 70 | 58 | 42 | 46 | 54 |
| | Spring | 58 | 42 | 42 | 58 | 38 | 62 | 31 | 69 | 46 | 54 | 45 | 55 | 42 | 58 |
| Spanish Classrooms (N=2) | Fall | 64 | 36 | 49 | 51 | 67 | 33 | 15 | 85 | 38 | 62 | 60 | 40 | 52 | 48 |
| | Spring | 65 | 35 | 49 | 51 | 36 | 64 | 40 | 60 | 56 | 44 | 53 | 47 | 48 | 52 |

[1] "S" designates sequences; "NS" designates nonsequences.

Table 12 continued

(EN CHILDREN)

| CLASSROOM | | Small Group S[1] % | Small Group NS[1] % | Seat Work S % | Seat Work NS % | Large Group S % | Large Group NS % | Recess S % | Recess NS % | Lunch S % | Lunch NS % | Opening/ Dismissal S % | Opening/ Dismissal NS % | All Contexts S % | All Contexts NS % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| English Classrooms (N=7) | Fall | 50 | 50 | 35 | 65 | 48 | 52 | 29 | 71 | 49 | 51 | 43 | 57 | 41 | 59 |
| | Spring | 43 | 57 | 41 | 59 | 40 | 60 | 47 | 53 | 44 | 56 | 44 | 56 | 42 | 58 |
| Bilingual Classrooms (N=1) | Fall | 55 | 45 | 20 | 80 | 26 | 74 | 31 | 69 | 75 | 25 | 27 | 73 | 39 | 61 |
| | Spring | 51 | 49 | 33 | 67 | 57 | 43 | 24 | 76 | 27 | 73 | 40 | 60 | 38 | 62 |

[1] "S" designates sequences; "NS" designates nonsequences.

Doris: [də]

Teacher: (Gives Doris the letter and tells her to put it on a pocket board)

Nonsequence:

(It is small group reading. Doris and her five peers are listening to the teacher read, "Father drove home and found the note".)

Teacher: (Asks Doris to name the words with the long 'O' sound)

Doris: Found

Teacher: (Repeats the question to the girl next to Doris)

The nature of the other adult-directed contexts, large group, and opening/dismissal were less conducive to communicative episodes that resulted in communicative sequences. Between 34% and 49% of the episodes in these contexts at any observation period were sequences. Again this was consistent with the nature of the classroom interaction in these contexts which consisted largely of voluntary or drilled answers for which no feedback was provided.

The relative frequency of communicative sequences in the peer-oriented contexts of seat work, recess, and lunch was similar. Sequences generally constituted less than 50% of the episodes in each context. This would seem to reflect the still developing conversational skills of the sample children. In many cases where rules of conversational etiquette in adult conversation would have designated a response or elicited a comment by the listener, children were observed to ignore speech directly addressed to them. Similarly, as has been shown elsewhere (Bates, 1975), they were generally not observed to provide cues to their speech partners that they were attending to the conversation. An increase in the frequency of the use of requests for clarification, indicative of attention to the speech of another, however, did suggest the children's development in this area by the end of the first grade year.

## C. Summary

In general the structure of children's communicative episodes in the three types of classrooms were similar. A majority of the observed episodes were initiated by some one other than the sample children. There was, however, a tendency on the part of most children to increasingly use English in those episodes which they initiated at the end of the year. Although the mode of children's communicative episodes was reflective of the general language use in the classrooms in which they were found, Spanish-preferring children exhibited a tendency to use Spanish with peers when the opportunity presented itself in all classrooms. Regardless of the language used, a majority of the communicative episodes engaged in by the children did not result in a communicative sequence. That is,

with the exception of small group activities which were designed to encourage a series of responses from individual children, communicative acts by sample children generally did not receive a response.

Interaction strategies related to language acquisition were an important part of the communicative episodes of all sample children. These accounted for at least 50% of the communicative acts occurring within a communicative episode. The principal English strategies used were similar for all sample children. However, the frequency with which different strategies were employed differed by classroom type. Formulaic expressions characterized the Spanish classrooms, whereas memorization and answering in unison typified the bilingual classrooms and verbal attention getters the English classrooms. These, to some extent, reflected differences in the activities in which children engaged in the various classroom types.

Individual contexts within the classrooms were found to influence the nature of the communicative episodes engaged in by the sample children. The adult-oriented contexts of small group, large group, and opening/dismissal were characterized by adult-initiated sequences in English in all classrooms. The strategies of memorization and answering in unison were common in these contexts. In the peer-oriented contexts of seat work, lunch, and recess, the strategies of verbal attention getters and formulaic expressions were more common.

The language proficiency of individual children influenced the way in which strategies were used. Children with greater proficiency in English were more likely than their less proficient peers to use strategies to initiate and sustain communicative episodes.

## FOOTNOTES

[1]The classrooms of the three sample children in kindergarten differed from this arrangement but were similar at each of the schools. At each, they contained four distinct areas -- housekeeping, blocks, art, and book corner. Children worked at tables or played on the floor in each area.

[2]These children had reading in English, as did the rest of their classmates, including all sample children. Thus, although these classrooms were designated as bilingual by the school district, they were considered English classrooms for the purposes of this study.

[3]Given the differences in language use and student populations, the students taught by each teacher were considered a separate classroom for this study. Thus, three were designated English classrooms and three Spanish classrooms.

[4]The kindergarten classroom in which one sample child was found differed from the first grades in that it was part of three combined classrooms in a large auditorium. The room was divided into four main sections -- art/book, math/housekeeping, puppet/tracing, and Spanish/fun. Children rotated daily from one area to another.

[5]This classroom was designated an English classroom for the purposes of the study, whereas all others at this site were considered bilingual classrooms.

[6]Data are presented in summary form, however, they are consistent with the findings for individual children with 37 of the 42 children following the general pattern in both the fall and spring.

Typical of the children who did not follow the general pattern, but initiated a majority of their communicative episodes was Susan. This child, an English-preferring girl with black eyes and jet black hair, eagerly participated in all classroom activities. The following episodes observed during a teacher-directed reading group typify the behavior of children who initiated a majority of their communicative episodes.

> (Susan is at the curved table with the teacher and 7 other members of her English classroom. The children are doing a letter and word recognition drill with flashcards.)
>
> Susan: (Watches intently as the girl next to her identifies the cards. Then the teacher holds the first one up to her)
> I, N, L, lit, mit, fit
>
> Teacher: Very good (Offers Susan an animal cookie)
> Do you know these?
>
> Susan: A, H, hat, sat, mat

Teacher: Two stars, very good, Susan (Allows her to take another cookie, then continues with the next child)

Susan: (Eats her cookie as the girl recites then says to the teacher:)
You know what I did at home? I did 'eat,' 'sat' one day and 'sit,' 'mit' (pause) and 'cat,' 'sat,' 'sit,' and I did them without the thing you gave me.

Teacher: You spelled them too?

Susan: (Shakes her head yes)

Teacher: Very good

Even in this small group reading activity which was structured for adult initiation of sequences, Susan was able to initiate a communicative episode. Beginning the sequence with the formulaic "You know what," she interrupted the activity with a comment related to the task at hand. Not only did she initiate the episode, but she also focused the topic of conversation on herself, a common practice among these children. (See Appendix E for the relative frequencies of other-initiated vs. target-initiated episodes for all children.)

[7]Although most children tended to follow the same general patterns of relatively equal proportions of adult/peer interaction in first grade, there were a number of children who consistently chose to interact with one speech partner over another. Adriana, an SP-2 child in an English classroom, and Jaime, an SP-2 child in a bilingual classroom, typified these contrasting types of children. For both children, approximately 40% of their total episodes were target-initiated. Their choice of speech partner, however, differed dramatically.

Adriana, a dark-complexioned girl with short straight black hair and alluring eyes, favored the teacher as a speech partner when she initiated interactions. Typical of her orientation to the teacher was the following example from an observation of seat work in which she was attempting to rapidly complete her copying assignment from the board.

(The teacher is standing in the back of the room consulting with another child)

Adriana: (Turns in her desk, interrupts and asks in a loud voice:)
Miss, how do you spell 'star'?

Teacher: (Ignores her)

Vera: (From her desk across the aisle)
S-T-

Adriana: (Ignores Vera, and repeats in a whiny voice:)
Miss, how do you spell 'star'?

Teacher: S-T and then look at 'car.' (Referring to the word 'car' that is already on the board)

Adriana: (Putting her hands over her ears in a gesture of exasperation)
I can't understand. They're talking too much.

Teacher: S-T-A-R

Adriana: (Writes 'star' on her paper)

As was typical of Adriana, she appealed to the teacher for assistance, using the common attention getter for the teacher, "Miss." Though her peer tried to offer the correct answer, Adriana ignored her and persisted in repeating the question of the teacher in the same form until she received attention. Her orientation toward the teacher was further emphasized by her choice of words -- referring to her peers as "them" -- by which she further aligned herself with the teacher.

In sharp contrast to Adriana was Jaime, a small pale-faced boy with very small eyes set in his round face. Of the interactions he began, only 19% were with adults, and these were almost totally confined to exhibiting a completed task. During the day, he frequently directed his attention to his peers rather than to the lesson at hand, a practice which often won disapproval from the teacher. The following small group reading session in Spanish typified his orientation toward peers.

(Children work in their Spanish workbooks on a task in which they circle words in a row beginning with 'sa-se-si-so-su')

Jaime: (Finished with the task, calls softly:)
Miss

Teacher: (Involved in assisting someone else, ignores him)

Jaime: (To boy across from him who has circled letters messily)
Parece un futbol.

Cesar: Encerré esto.

Adolfo: Es una ____.

Cesar: Mira acá. (Pointing out the letter N which Adolfo has colored brown)

Jaime: ¿Sabes por qüe? Porque lo pintaron <u>brown</u>.

Maria: Tú las hiciste, Jaime.

Jaime: ¿Eh?

Maria: Tú las hiciste.

As was typical of Jaime, he failed to persist in trying to attract the teacher's attention. When his verbal attention getter was ignored, he

turned immediately to initiate an episode with his peers. His request for clarification when Maria introduced a new topic exemplified his persistence in maintaining interaction with his peers.

[8]The only exceptions to this -- the SP-2 children in Spanish classrooms and the EN child in bilingual classes -- were where the cell size of the groups was very small (two children and one child respectively). In both cases, the children were characterized by a relatively high frequency and diversity of verbal strategies and low percentages of nonverbal strategies in relation to their total strategy use. Although of limited comparative value, the information on these children does provide some insight as to the experiences of children in these classroom types.

[9]Others appeared to perceive the situation as non-threatening and tended to answer more freely in the anonymity of the large group situation than when engaged in one-to-one interaction.

[10]The few exceptions who had a majority of their communicative episodes culminate in a communicative sequence were generally those children who also tended to initiate more episodes.

## V. INDIVIDUAL DIFFERENCES

The two previous chapters presented the general trends related to the communicative episodes involving children of different English language proficiency. The former examined the experience of children in Head Start programs implementing different bilingual bicultural preschool models. The latter focused on the communicative episodes of the same children and their control group counterparts in different types of first grade classrooms. This chapter summarizes the outcomes of these experiences by comparing the individual children making up the sample in a number of ways. First, the development of different interaction strategies for individual children is discussed. Second, the relationship of such strategies to the acquisition of a second language is explored. Finally, the average levels of English acquisition for children in different types of classrooms is examined.

### A. Development of Interaction Strategies

There appears to be a hierarchical order to the development of interaction strategies. Although the order of acquisition was similar for all sample children, the number of strategies was closely tied to the level of proficiency of the individual child in the target language at a given point in time. Table 13 depicts visually the order of acquisition of English strategies for the experimental children in the sample. As can be seen, the patterns for SP-1 and SP-2 children differ dramatically. During the initial observation of the children in Head Start, shown as the capital letter A, few of the children who had had little previous exposure to English used any strategies in English. The few strategies employed by some children -- repetition[1], memorization, one word answers, and literal translation -- were those which might be considered among the least cognitively demanding of all the strategies investigated. In addition, as previously shown, these strategies often did not serve to further interaction. By the second observation period, shown as the letter B, more children were using repetition and memorization. However, with the exception of Ricardo, the boy who made the greatest gains on the tests of English language proficiency and who was observed to use only English in the Head Start classroom at the end of the year, little diversification of strategies was noted among SP-1 children.

SP-2 children, on the other hand, had a greater variety of strategies on entering preschool. In addition to the strategies used by the SP-1 children, most SP-2 children commonly used formulaic expressions and verbal attention getters. As pointed out previously, these strategies were more interactive than those used by the less proficient children. Thus, even on entering preschool, the SP-2

Table 13 : Sequence of acquisition of language strategies in English by language group.[1]
(Experimental children)

| | | Repetition | Memorization | Formulaic Expression | One Word Answer | Verbal Attention Getter | Answers in Unison | Language Switch | pidginization | Elaboration | Literal Translation | Request for Clarification | Selective Memorization | Onomatopoeia | Story Telling | Talks to Self | Word Play | Reads Aloud to Self | Role Plays | Corrects/ Teaches | Monitoring | Message Abandonment | Appeal for Assistance | Circumlocution | Changes Topic | Anticipatory Answer |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SP I CHILDREN | Carlos | A | D | C | | C | D | | | | | | | | | | | | | | | | B | | | |
| | Miguel | B | B | B | | C | D | B | B | | | | | | | D | | | | | | | | | | |
| | Marisol | D | | D | | | | | | C | | | D | | | | | D | | D | | | | | | |
| | Reynaldo | C | C | C | | D | D | | | D | D | | | D | | D | | | D | C | | | D | | | |
| | Esteban | B | B | C | A | C | C | | | C | | | D | | | D | | | | C | | | | | | |
| | Alicia | C | D | C | A | C | C | | | B | | | C | | | | | | | | | | | | | |
| | Ivette | B | A | | A | C | C | | C | C | A | D | | C | | C | | C | C | C | C | C | D | C | | C |
| | Homero | C | C | A | C | D | D | | | | | | | | | | | | | | | | | | | |
| | Ernesto | C | C | C | A | C | C | | | C | | | D | B | | D | | | | | D | | | | | |
| | Ricardo | A | B | | | B | B | | | B | B | | | | | C | D | C | | C | B | | B | | | |
| | Ramona | C | C | | B | B | | | | C | | C | | | | | | | | C | C | | | | | |
| | Julio | A | B | A | | C | C | | | C | | D | | | | C | | C | | C | C | | D | | | |
| SP II CHILDREN | Bonita | A | A | A | | A | A | A | | D | | | | C | | C | | | C | A | A | D | | | | C |
| | Adriana | A | A | A | C | C | C | A | | C | D | | | C | | C | | D | B | C | | C | | | | D |
| | Janet | B | A | A | | A | C | B | | C | | D | | | B | D | | | A | C | D | C | D | | | |
| | Alberto | C | C | A | A | C | C | | | A | | | D | B | C | B | D | | | C | | | | | | |
| | Doris | A | B | A | | A | C | | A | C | | | | C | C | | | D | | C | C | | C | | B | |
| | Lorenzo | B | C | A | | B | C | | | C | | C | | | C | C | | C | | C | C | | C | | | C |
| EN CHILDREN | Enrique | A | A | A | | A | C | C | A | A | | C | | C | A | C | D | D | C | A | A | C | D | | C | C |
| | Susan | B | C | C | | B | C | | | A | | C | | | | C | | C | | D | D | C | C | C | C | C |
| | Ruth | A | A | A | | A | A | | | A | | B | | | | B | | | | A | | | D | | | |
| | Carmen | B | C | A | | A | C | | | A | | C | | | | B | | C | | C | C | | D | | | |
| | Gregorio | A | | A | | A | | | | A | | D | | | | | | | A | D | D | | | | | |

1 A minimum of two observations of a child using a strategy in a given time period was set as the criteria for acquisition. "A" designates the first observation period, "B" the second, "C" the third and "D" the final observation period.

children had the necessary means to initiate communicative episodes. The majority of these children, however, had not as yet developed such strategies as elaboration, teaching, and requests for clarification which would tend to sustain an episode over a number of communicative acts. In addition, with the exception of one word answers, which these children were never observed to use, SP-2 children used even those strategies which the SP-1 children had acquired more frequently than did their less proficient peers throughout Head Start.

English-preferring children used a repertoire of strategies similar to that used by SP-2 children. Elaboration was, however, used by all the children even on entry to Head Start. These children also used the strategies of repetition and verbal attention getters more frequently in Head Start than either of the other language groups. SP-2 children, however, used formulaic expressions and memorization more frequently than did their EN counterparts.[2]

By the third observation period at the start of the first grade year, SP-1 children were generally using a greater variety of strategies. Almost all used the mainstays of the SP-2 children in Head Start, formulaic expressions and verbal attention getters, and most had begun to elaborate. Children of all groups used the strategy of answering in unison which reflected the large group structure of many of the activities in first grade. While all of the children of the SP-2 and EN groups had acquired this strategy at the third observation period, a number of the SP-1 children did not use it until the end of the first grade year. Their hesitancy to use their second language in such group situations is also indicated by the greater tendency of these children to use selective memorization. Some of the SP-1 children employed the interactive strategy of teaching others, but only one used requests for clarification and none told stories, a strategy demanding advanced syntactical and lexical development. Similarly, while some of these children were talking to themselves in English, only two had acquired the strategy of self-correcting or monitoring their speech in this language.

It is worthwhile to note the experience of Ivette and Reynaldo. Ivette, who made use of nearly all the strategies during the third observation period, also showed the greatest gains in English proficiency of any experimental child from preschool to first grade. Similarly, Reynaldo, who was a shy child who seldom spoke in Head Start, began to use the common initial strategies in first grade, and by the end of the first grade year had increased the number of strategies he used more than any other experimental child. He was also the experimental child who showed the greatest gains in English proficiency over the first grade year. Carlos, Miguel, Alicia, and Homero, on the other hand, used principally the less demanding strategies throughout the study, and theirs were among the lower English language proficiency test scores.

A comparison of Carlos with Julio, both SP-1 children, serves to illustrate the two predominant patterns in the acquisition of English interaction strategies illustrated by the table. Although both began the Head Start year with no measurable oral proficiency in English,

by the end of first grade their repertoire of English strategies differed substantially.

Carlos, a curly brown haired boy characterized by his small stature and delicate features, spoke only Spanish at the beginning of the Head Start year unless directly encouraged by the teacher to employ a few words in English. In the fall of the year, for example, the following interaction occurred during work time:

Teacher: ¿Cúantos años tienes?

Carlos: (Holds up three fingers)

Teacher: (Checks the class chart and discovers that he had a birthday the previous Friday. She directs the class to sing Happy Birthday to him, then directs each:)
Darle un abrazo.

Carlos: (Smilingly receives the abrazo of his peers)

Teacher: (To Carlos)
Diles 'Thank you.'

Carlos: Thank you

As was typical of SP-1 children at this level, Carlos merely repeats the formulaic English expression modelled by the teacher.

His use of English in the spring was generally confined to the same strategy. For example, in another episode at work time, the teacher once again was modelling the use of politeness formulas in English. Carlos had just been involved in a scuffle with one of his female classmates. The teacher scolded Carlos and told him to tell the girl he was sorry and Carlos repeated, "I'm sorry." The similarity of the fall and spring contexts are striking. In both, Carlos merely repeated the expression modelled by the teacher.

After a year of kindergarten, Carlos' repertoire of English strategies had expanded somewhat, but was still very limited to basic strategies such as the use of formulaic expressions and verbal attention getters. During the fall observations in first grade, he had mastered the politeness formulas used daily in the classroom, as he responded to the teacher's roll call routine with a "no, mam," indicating he had not eaten breakfast in the cafeteria. Although he rarely initiated interactions with the teacher, he was able to use the verbal attention getting device "Miss" to attract the teacher's attention. In general, he continued to respond reluctantly to the increased emphasis on English language skills which he faced in the first grade classroom. An example taken from a large group English language arts session typifies his usual strategy:

(Teacher has just finished reading a short story in English and now calls on different children to check their comprehension.)

Teacher: OK, Carlos, what happened in the story?

Carlos: (Extended pause)
Está jugando pelota.

Teacher: Está jugando pelota. ¿Y despúes?

Carlos: Está cortando el sacate.

Teacher: Está cortando el sacate. He's cutting the grass . . .
(The teacher continues questioning Carlos in both Spanish and English, with Carlos responding totally in Spanish. Finally she ends the interaction with:)
Very good (Points to the door of the house in the picture, and asks:)
¿Quien está en la puerta?

Robert: (From in back, answers "Andrew" as the teacher writes the name on the blackboard)

Carlos: Andrew

As evident from this example, despite the teacher's constant translation, Carlos consistently responded in Spanish to the teacher's questions in English. He did, however, understand her questions, as indicated by his correct answers to them. The only time he used English was when he repeated the English name after his classmate.

Carlos continued to successfully avoid engaging in interaction in English even at the end of the first grade year. At this time, periodically he would repeat in unison with others the English vocabulary words modelled by the teacher during a review of the day's writing assignment. The majority of the time, however, he continued to successfully avoid any interactions in English, as evident from the following example from late in the first grade year.

Carlos: (Goes to the teacher's side and lays his completed copying assignment in front of the teacher, who sits at her desk)

Teacher: You finished?

Carlos: (Points to where he has started copying a second time)

Teacher: That means you've gone through here and started again here. (As she points to each set of words he has copied twice)

Carlos: (Nods affirmatively)

Teacher: (Goes on to check assignment, and ends with:)
Write the whole word, toda la palabra. OK?
Did you understand?

Carlos: (Nods yes and returns to the table where boy next to him asks immediately:)

Boy: ¿Dónde pusiste mi eraser?

Carlos: Aquí (As he picks up eraser sitting at far end of the table and hands it to the boy)

In this series of sequences taken from a remedial English reading session Carlos successfully managed to avoid any verbal interaction in English by simply using nonverbal strategies of pointing and nodding his head. The teacher correctly interpreted and verbalized for him all his responses to her questions. The sequence with his peer which followed immediately, however, indicated that he readily interacted in Spanish. By the end of first grade, he had still only demonstrated the use of five strategies.

Julio, in his use of strategies over time, provides a sharp contrast to Carlos. A tall, happy-go-lucky boy, Julio spoke almost totally in Spanish with his peers at the beginning of the Head Start year. Periodically, however, he took the initiative in using English with adults. These were almost always in the form of short directive formulaic expressions. One morning after breakfast, for example, he was still eating when the teacher announced in English that the children should form a circle and hold hands. Julio protested, "Wait a minute, Wait for me," repeating his directive for emphasis as he hurried to throw away his milk carton and join the circle. Similarly, he was observed addressing the English-speaking custodian to establish claim on a leftover hamburger with "Hey, that's mine."

By the end of the Head Start year, Julio's repertoire of strategies had expanded somewhat, but was still very limited. One of his favorite activities was participating in the singing and motions to the song/rhyme "mulberry Bush." He had the routine so well memorized that once, when the teacher in leading the group, neglected to mention combing one's hair after dressing, he reminded the teacher, "A peinamos." The teacher acknowledged his remark, "Julio says we need to comb our hair again," and the group performed and recited the proper routine. As evident from the fact that Julio used Spanish to point out the missing English lines, Julio at the end of the Head Start year still tended to use his native language except for those situations in which he would depend on memorized words or phrases either in the form of a formulaic expression or a favorite song or rhyme.

By the beginning of first grade, Julio had undergone a dramatic change in the variety of English strategies he used. At this time, he spoke mainly English in the context of the classroom, even with his peers, as shown in this example from a seat work context in the fall:

Julio: (To no one in particular as he holds up his paper) Look where I am.

Samuel: (Looks at Julio's writing and comments on it)

Julio: (Writes something on his page and then, looking toward Samuel, adds:) I gonna catch up to you.

Samuel: (Ignores him)

Although his speech still retained certain formulaic structures such as "gonna," he now used English, together with the action of holding up his paper, to establish contact with peers. He elaborated spontaneously. Ten minutes later during a small group reading lesson with the teacher, he was observed helping a peer to identify a word in English. When Julio's classmate began to underline the word 'like' instead of 'little' during a word recognition exercise, Julio informed him "and two T's" and the boy corrected the error by underlining 'little.' Thus, Julio was willing to share his knowledge of English with others. This knowledge, as evident from the example, was based on more than mere memorization of a sequence or structure.

By the end of the first grade year, Julio was exhibiting the use of a few additional strategies which exemplified his increasing attention to the speech of those with whom he interacted. After assigning roles to his peers for reading of a story from his English primer, Mike told Julio to begin reading. Apparently not hearing, Julio asked "What?" and Mike reiterated, "We.., read." Later as they continued reading, Julio came upon a word in his reading that he did not recognize and asked Mike for assistance in identifying the word. In using the strategies of requesting clarification of his peer's utterance and appealing for assistance, Julio exhibited an increased attention to the form of speech and a willingness to use it to interact, rather than merely respond.

The patterns of English strategy use by individual SP-2 children were more similar than those of SP-1 children represented by Carlos and Julio. SP-2 children all used elaboration by the third observation period and all taught others. Most talked to themselves as they carried out their school work, but unlike their SP-1 counterparts, they had also acquired the strategy of monitoring and self-correcting their speech in English. These children also exhibited the greatest variety of strategies of the three language groups.

EN children all used the communicative episode-sustaining device of request for clarification in first grade and most monitored their use of English. In addition, by the end of first grade, most of these children had added the conversation-initiating strategy of appeal for assistance. As Table 13 illustrates, certain strategies were never used by EN children. This suggests that certain strategies are related exclusively to second language learning. These include one word answers, literal translation, and selective memorization. Language switching was employed only by that EN child who attended a bilingual first grade.

The data for the control children, although limited to the third and fourth observation periods, were consistent with those for the experimental group. The strategies which were cognitively less demanding and structurally less complex were employed by most children during the fall observations in first grade. A greater variety of strategies were used by most children late in the year, with requests for clarification and appeals for assistance being limited largely to SP-2 and EN children. Certain children of both the SP-1 and SP-2 groups -- specifically, Jorge, Roberto, and Vicki, in the former and Jaime and Juanita in the latter --

continued to use mainly the less demanding strategies throughout the year. Dominga, Marta, and Marcela, on the other hand, greatly expanded the range of strategies they employed in the classroom. These children were also among those who showed the greatest gains in English language proficiency.

B. Strategies and Language Acquisition

To determine more precisely the relationship between the range of interaction strategies used by individual children and growth in language proficiency, SP-1[3] children were ranked by change in both English and Spanish language proficiency from one observation period to the next. Rank order correlations of these measures and two measures indicative of the children's use of interaction strategies were then calculated. These measures were : (1) change in the absolute frequency of strategies used in each language; (2) change in the frequency of strategy use in English and Spanish as a percentage of the total number of strategies employed.

The results, presented in Table 14 suggest that, at least in the case of the children studied, the use of interaction strategies in English by children of limited proficiency is strongly related to increased proficiency in that language. It appears that in the situation where the language environment is predominantly Spanish and children have very limited proficiency in English, as in the case of Rio Grande City, increased use of the same strategies, principally those of repetition, memorization, and one word answers will be related to relatively greater increases in English proficiency. In situations where children have the opportunity to diversify strategies, such as the largely English language environment of the East Los Angeles Head Start or have developed sufficient proficiency to experiment with other strategies, as is the case with children at both sites from the second to third observation periods, a high correlation between increases in the number of strategies and increased English proficiency was found. In first grade[4], both increases in total English strategies employed and proportional increases in the use of strategies in English remain highly correlated with English language proficiency in the English language environments of the Corpus Christi classrooms. Weaker positive relationships were found in those situations where the sample children were distributed in classrooms with diverse language environments.[5]

When the relationship between interaction strategies used in the classroom and English language proficiency was examined by classroom type, consistent patterns were also found. SP-1 children in both English and bilingual classrooms who showed the greatest diversification in English interaction strategies over time also exhibited the greatest increases in English language proficiency. As shown in Table 15, the correlations in each case were significant. No similar trends were found with either SP-2 children or EN children in English classrooms. This would seem to be a result of these children having already attained a relatively high level of English language proficiency and use of most of the

Table 14: Rank order correlations of language strategies with increased language proficiency by site.

| | Head Start I to Head Start II | | Head Start II to First Grade I | | First Grade I to First Grade II[1] | |
|---|---|---|---|---|---|---|
| | English | Spanish | English | Spanish | English | Spanish |
| **Change in the number of Strategies used in the Target language** | | | | | | |
| CORPUS CHRISTI | -[2] | - | - | - | .85 | -.95 |
| EAST LOS ANGELES | .88 | .57 | .90[3] | .30 | .71 | -.57 |
| RIO GRANDE CITY | -.42 | .71 | .88 | - | .59 | - |
| **Change in strategies in the target Language as a percent of total target language** | | | | | | |
| CORPUS CHRISTI | - | - | - | - | .85 | .40 |
| EAST LOS ANGELES | .68 | .16 | .70 | .40 | .80 | .37 |
| RIO GRANDE CITY | .90[3] | -.05 | .68 | - | -.85[4] | - |

[1] Includes both experimental and control children.

[2] Cell size did not permit this calculation.

[3] Significant at the $p \leq .05$ level.

[4] The high negative correlation coefficients over this period of time is a result of the addition of a Spanish speaking aide in the classroom containing the two children who had interacted most in English at the first observation period. Thus, although the number of strategies used by these children and their English language proficiency increased, the ratio of their English to Spanish use decreased.

Table 15: Rank order correlations of English language strategies with increased language proficiency of first grade children by language group.

| | English Classrooms | Bilingual Classrooms |
|---|---|---|
| **Change in the number of strategies used in the target language** | | |
| SP I | .85[1] | .95[1] |
| SP II | .15 | -[2] |
| EN | -.62 | - |
| **Change in strategies as a percentage of total target language** | | |
| SP I | .30 | .15 |
| SP II | -.60 | - |
| EN | -.93[1] | - |

[1] Significant at the $p \leq .05$ level.

[2] Cell size did not permit this calculation.

interaction strategies. In fact, the significant negative correlation between acquisition level and the proportion of interaction strategies used by EN children suggests that as these children increase their proficiency over the year, certain strategies may be abandoned and perhaps more appropriate ones developed as greater proficiency in English is attained.[6]

The examples of Dominga, an SP-1 child in an English classroom at Rio Grande City and Alberto, an SP-2 child in the same type of classroom at East Los Angeles, illustrate the findings presented in the table.

Dominga, a pale thin girl with dark brown eyes, was a shy, quiet SP-1 girl who early in the first grade year seldom initiated interactions with her peers. Her shyness was exemplified not only in her classroom interaction patterns but also in her body language; frequently she sat at her desk, hands in her mouth, squirming her body to the side in an apparent gesture of shyness and embarrassment. In spite of her shy demeanor, Dominga participated eagerly in class activities and answered in unison every question asked by the teacher in large group sessions. For example, in a large group language arts activity at the beginning of the year, Dominga responds with others "circle and stick" to the teacher's question of how to make a 'B.' As the instructor moves on to the next picture, Dominga says fairly loudly "bus" before either the teacher or her peers can say it. When the teacher asks the children how many ride the bus, Dominga raises her hand. The lesson continues and when the teacher asks, "Do you have a test?" referring to the weekly spelling test scheduled for the next day, Dominga nods in response. When the teacher asks when the test is, Dominga says softly, "tomorrow" and nods. She then gives a sad little smile expressing regret regarding the impending test. Thus, Dominga, who had by far the lowest language proficiency of the five sample children in this classroom, relied primarily on the strategies of repetition, answering in unison, and nonverbal responses and attention getting devices to communicate in English. At this point in time, she tended to interact with her peers in Spanish, but was observed on the playground to enthusiastically participate in games such as patty cake, which required memorized lines such as "My sailor went to sea, sea, sea."

By the end of the year, Dominga had added eight additional strategies to her repertoire. No only had she become more verbal in her attempts to gain the teacher's attention, but the more linguistically demanding strategies of monitoring and teaching her peers were among her most common. During small group reading session in the spring, for example, she spontaneously begins to help a classmate who stumbles over a word by reading for her: "She went to look for her. She looked and looked. And then she saw them." As the

next boy begins to read Dominga helps him on. Dominga now interacted primarily in English with all of her peers and even tended to respond in English when addressed in Spanish as shown by the following episodes occurring during seat work. Dominga, showing off, says, "I have scissors," as she returns to her desk. Toni, seeing her, says "¡Dale!" and Dominga emphasizes, "You don't have them." Linda then asks her something in Spanish and Dominga replies, "yes." Over the course of the year, Dominga not only developed a number of additional interaction strategies in English but was more willing to initiate interactions in that language. She showed the greatest increase of any child in the sample on the tests of English proficiency at the end of the year.

* * * * * * *

Alberto, a large SP-2 child with light brown hair, had had some proficiency in English even upon entering Head Start. He was very verbal in both English and Spanish, although he used English on most occasions in the English environment of his classroom. Even early in the first grade year he employed a variety of strategies and those of elaboration, repetition and teaching were among the more common. For example, during a seat work activity related to Halloween, Alberto uses all three of these strategies in two communicative episodes. Alberto, seated at a small table coloring goblins, says to a girl at the end of the table engaged in the same task, "you can do two goblins." The girl responds with the request for clarification, "Huh?" Alberto continues, "You can do two goblins. Sally got two goblins." Alberto looks at the second mimeo sheet that Sally has brought to the table and says, "Oh no, it's a boat -- I saw somebody got two." The girl who is busy coloring does not reply. In these brief interchanges, he attempted to explain to his peer that she could color more than one sheet and maintained this topic of conversation through repetition. When he found that he was mistaken he explained by elaborating on his previous experience.

At the end of first grade, Alberto was still making use of the same strategies although he was observed to use word play in a few communicative episodes. As shown by the following example, he continued to use repetition as a topic continuer and to spontaneously elaborate on his utterances. Alberto is doing seat work at a small table with five other children. As he draws pictures that start with the letter 'P,' he says, "P, P-I-G, pig, pig, (pause), porky pine (sic), porky pine; spell porky pine." The boy across from him says "Pork, pork -- spell pork." Alberto responds, "P-O-L- (pause) R." He stops and then asks no one in particular, "How do you spell porky pine?" Another boy repeats it and

Alberto again attempts to spell the word. Although remaining among the more proficient SP-2 children, Alberto showed a slight decline in his English language proficiency at the end of the year.

## C. Classroom Differences

Although beyond the scope of the study as originally designed, the location of the sample children in first grades providing various types of services to children of different language abilities makes appropriate at least a tentative examination of the performance of sample children in different types of classrooms. Table 16 presents the average SAI scores on the BSM for each group of students. As can be seen, SP-1 children in the English and bilingual classrooms made the greatest average gains in their English language proficiency. However, on the average, they continued to score below their SP-2 and EN counterparts in the same types of classrooms. It should be noted, however, that the table does not include the one SP-1 child in an English classroom and the two in bilingual classrooms who failed to respond to the test in English at either the beginning or the end of the year.

SP-1 children in Spanish classrooms had the lowest average English proficiency scores and actually showed a slight decrease in their average proficiency scores. All, however, were able to respond to the test items at both data collection periods. SP-2 children in the same type of classroom made the greatest average gains of their language group in English language proficiency, although their average scores were the lowest of their language group.

Children in the Spanish classrooms exhibited the greatest gains in their levels of Spanish language proficiency. The SP-1 children in these classrooms also showed the highest average levels of Spanish language acquisition. The single EN child in a bilingual classroom also increased his Spanish proficiency such that he equaled the level of SP-1 children in English classrooms. All EN children in English classrooms failed to respond to the items on the Spanish version of the BSM.

## D. Summary

A number of consistent patterns related to the use of interaction strategies by individual children were presented in this chapter. The order of acquisition of interaction strategies was similar for all children. Children more proficient in English were, however, able to use a greater number of English strategies at an earlier age. In addition, a few of the children less proficient in English had not greatly increased the number of strategies they used even by the end of first grade.

Among children of limited English proficiency in English and bilingual classrooms, a significant relationship was found between increases in the number of strategies used and gains in English language

Table 16: Comparison of average levels of language proficiency and mean gains on language proficiency tests by language group and classroom.[1]

| | SP I | | | | SP II | | | | EN | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | English | | Spanish | | English | | Spanish | | English | | Spanish | |
| CLASSROOMS | $\bar{x}$ | $\bar{x}$ gain | $\bar{x}$ | $\bar{x}$ gain | $\bar{x}$ | $\bar{x}$ gain | $\bar{x}$ | $\bar{x}$ gain | $\bar{x}$ | $\bar{x}$ gain | $\bar{x}$ | $\bar{x}$ gain |
| English | 87.5 | 6.3 | 84.8[1] | -[2] | 91.6 | 1.1 | 88.5 | 1.3 | 95.8 | 2.8 | - | - |
| Bilingual | 89.5 | 5.6 | 87.4 | - | 93 (N=3) | - | 88 | - | 93[3] (N=1) | - | 85 | 5 |
| Spanish | 73.6 | -1 | 89.6 | 4 | 86 (N=2) | 2.5 | 88 | 3.5 | - | - | - | - |

[1] Only children providing responses to the tests were included in the comparison.

[2] Two of the four children at Corpus Christi refused to respond in this language.

[3] No data were available.

proficiency. These children also made the greatest mean gains in their *level of English language proficiency over the first grade year. On the* average, however, they continued to score lower than their more proficient peers in the same types of classrooms.

## FOOTNOTES

[1]Repetition at this stage was limited primarily to elicited responses to the teachers' modelling or repetition of one's own utterances.

[2]An examination of the Spanish strategies for those few EN children that were observed to use Spanish in Head Start suggests that the pattern of strategy use in the classroom may be consistent across languages. As with the Spanish-preferring children, formulaic expressions, repetition, and one word responses were found to be the most common strategies.

[3]Only this language group provided a sufficient number of subjects at the Head Start level to perform the calculation.

[4]As the entire sample of children was used, sufficient subjects were available to perform the same comparisons with SP-2 children at East Los Angeles and Corpus Christi on the first grade data. No significant correlations or consistent trends were found.

[5]Although not significant, positive relationships were found between increased number of Spanish strategies and acquisition of Spanish in Head Start. This suggests that these strategies may be appropriate for students who are still developing proficiency in their first language. The high negative correlation found at the Corpus Christi site would seem to be an artifact of the reluctance, noted earlier, of children proficient in Spanish to use their first language in the school context.

[6]This is supported by the observational data in that in the spring, children were observed to use such strategies as guessing. That is, they took clues from the context of reading materials to insert words, the written form of which they could not yet decode.

[7]These were also the children who used the fewest English interaction strategies during the year.

# VI. CONCLUSIONS AND IMPLICATIONS

This chapter summarizes the results of the study of interaction strategies of first graders who have experienced different bilingual preschool models. Results are discussed in terms of the Head Start experience, the first grade experience and longitudinal findings. Implications of the findings conclude the chapter.

## A. Conclusions

### 1. The Head Start Experience

Observations of children in the Head Start classrooms showed that the communicative experiences of the sample children varied depending on the curriculum model in which they were participating. Furthermore, as a result of the differing structure of activities, different interaction strategies were used relatively more often by children at the three sites under study. The activities of the model being implemented at Rio Grande City were arranged in largely adult-initiated communicative episodes. This was a result of the relatively large amount of time devoted to structured tasks related to premath and preliteracy skills. The structure and content of the activities at this site, in turn, tended to elicit relatively more frequent use of the memorization strategy. At the East Los Angeles site, adult-initiated communicative episodes also predominated, due to the emphasis of that model on one-to-one teacher-child interaction. These interactions were based on a questioning technique specifically designed to elicit use of the elaboration strategy by the children. The frequency of these interactions, together with the teachers' tendency to encourage a number of conversational turns, accounted for a longer average communicative episode at this site. The activities at Corpus Christi, emphasizing the use of concrete objects during small group language-focused activities, tended to elicit frequent use of the repetition strategy at this site.

In addition, significant differences were found between the sites in terms of the content of the communicative episodes. Children at Rio Grande City had a significantly higher percentage of episodes involving preliteracy and premathematics practice that did children at the other two sites.

Sociocultural characteristics of the community and classrooms in which Head Start programs were located influenced the language in which communicative episodes were carried out. At Rio Grande City, where most children had limited proficiency in English, the predominant classroom language was Spanish, and this language was used in a majority

of episodes involving the sample children. At the other sites where the classroom populations included a majority of children with at least some proficiency in English, this language predominated in the classrooms.

There appears to be no consistent transfer to the first grade of the practice in the use of the second language strategies gained in Head Start. When children at each site who had participated in the bilingual preschool models were compared to a matched sample of children who had not participated in the models, no significant differences were found between the groups on a number of measures reflective of their communication patterns.

## 2. The First Grade Experience

Although not directly related to the objectives of the study, a finding worthy of note is that the programs for limited English proficient children varied substantially not only across sites but within a single school. One school, for example, offered three types of very different services at the first grade level: classrooms in which the all English environment had a daily English as a Second Language component; a classroom in which English and Spanish both served as a medium of instruction and concurrent translation was common; and classrooms in which Spanish , complimented by ESL sessions, served as the principal medium of instruction and the sole language of literacy training. Another school had classes in which English was the medium of instruction for all children, as well as classes in which instruction was largely in English but a small group of nearly monolingual Spanish children received twice-weekly language arts lessons in Spanish. A third school at yet another site had one English medium classroom like the latter and classrooms in which all children received instruction in both English and Spanish.

Interaction strategies related to language acquisition were an important element in the communication of all sample children. These, on the average, were utilized in at least half of a child's communicative episodes in the classroom. Communicative acts not involving strategies generally served the function of responses.

With such variations in instruction paradigms even within the same school, classroom type was found to be the most important factor in determining the mode of children's communicative episodes. The structure of the communicative episodes in terms of the initiator, speech partner, length, and strategies employed was, however, generally similar regardless of classroom type. Communicative episodes were generally initiated by someone other than the target child and adults were the primary initiators of these episodes. A majority of communicative episodes did not result in a communicative sequence, that is, when someone other than the sample child began an episode, this individual generally did not respond to or provide feedback to a response by the sample child. Similarly, sample children more often than not, did not expand on their own communicative act or provide feedback to a

response by another when they themselves initiated an episode. The exception was in the context of small group, in which activities were structured to encourage communicative sequences.

Individual contexts within the classroom greatly influenced the nature of the communicative episodes engaged in by the sample children. These could generally be divided into two types: adult-oriented contexts, including the instructional activities related to small groups, large groups, and opening/dismissal; peer-oriented contexts consisting of the instructional activities involved in seat work and the noninstructional contexts of recess and lunch. The former type was characterized by other-initiated episodes occurring generally in English, whereas the latter type consisted of relatively more target-initiated episodes in Spanish involving peers. The types of strategies most commonly employed also varied by context with memorization and answering in unison being used principally in adult-oriented contexts, and formulaic expressions and verbal attention getters typifying peer- oriented contexts.

Language proficiency was found to influence the uses to which strategies were put. Spanish-preferring children who were relatively proficient in English, for example, used strategies such as repetition and formulaic expressions interactively. That is, repetition, formulaic expressions and elaboration were used to initiate and sustain communicative episodes, especially with peers. The children who were less proficient in English , on the other hand, used these same strategies primarily as responses to questions. Similarly, the less proficient children were more likely to use nonverbal strategies to avoid verbal interaction in English than were their more proficient peers.

3. Longitudinal Findings

A number of components of the communicative episode were found to vary with the age and educational experience of the children regardless of their English language proficiency. All children increased the relative frequency of their interactions with peers over time, although interactions with adults predominated in most instructional activities. Similarly, Spanish-preferring children maintained a tendency to use Spanish when interacting with peers. This tendency, however, decreased relative to the language proficiency of the child and the opportunity provided for interaction in Spanish by the different classroom types. Finally, there was a general increase in the average number of turns, or communicative acts performed by children in each episode they engaged in over time. This suggests that the children were becoming more competent speech partners with increasing age and school experience.

There appears, at least for the children studied, to be a hierarchical order to the development of interaction strategies. The same order of acquisition was found for all children regardless of language proficiency. Children of all groups initially used strategies

that were largely receptive then with increasing language proficiency used more interactive strategies. As might be expected the children more proficient in English were able to use a greater range of strategies at an earlier age than their less proficient peers. In addition, it was found that certain strategies, such as one word answers, literal translation and selective memorization were exclusively second language strategies as they were never used by English-preferring children.

The use of interaction strategies in the second language can be an important factor in increasing proficiency in the second language, at least among children of limited English proficiency. It was found that those children who used a greater range of strategies over time in the first grade classrooms, generally showed the greatest increases in English language proficiency. A similar relationship was found between relatively greater use of the same strategies and increased proficiency in English. This relationship was especially evident for children of very limited proficiency in English during their Head Start experience.

There appears to be little relationship between the increased use of the strategies investigated and increased English language proficiency for children who are relatively proficient in English. This would seem to be a result of these children already being in command of most of the strategies at the time of the study. The significant negative correlation found between the proportion of interaction strategies used by English-preferring children and increased language proficiency suggests that certain strategies may be being abandoned as greater proficiency is achieved.

A comparison of average scores on the language proficiency measures showed that children of the lowest language proficiency groups, in English and bilingual classrooms, made the greatest mean gains in English language proficiency over the first grade year. These children on the average, however, continued to score lower than their more proficient peers in the same types of classrooms.

## B. Implications

Obviously the results of this study must be considered exploratory. They do, however, suggest certain implications for instructional practices in bilingual education programs and the study of language acquisition in bilingual settings. First, the study points out the difficulty in defining a "bilingual education program" even within the same school. Programs designated as bilingual education may be offered to only a small group of students or to all children within a single classroom. They may range, as was the case in this study, from biweekly instruction in native language arts to nearly total use of the native language, complimented by brief ESL sessions. Given the relationship found between the type of classroom and the nature of the communicative episodes in which a child is involved, it would seem necessary to

characterize the type of program in which a child or group of children is participating in order to adequately determine the effects of that program.

Second, the results presented here suggest that language learning takes place in a variety of instructional and noninstructional contexts with both peers and adults. Thus, studies which limit themselves to one type of context, such as teacher-directed lessons, may be overestimating the importance of such contexts in the educational experiences of young children.

Third, the tendency of the children to use one or another language with certain speech partners regardless of the general language environment of the classroom, suggests that in dual language environments, a designation akin to our own "language preference" may be more useful than that of language dominance in the study of young children. This variation in mode by speech partner also emphasizes the importance of using research techniques such as classroom observations to assess a child's language use in different contexts.

The children's Head Start experiences, which were structured to emphasize practice with different strategies, as well as the contextual variation in strategy use in first grade, suggest that instructional experiences can be designed which provide practice with particular interaction strategies. Given the relationship between the use of a number of interaction strategies and increased English proficiency of less proficient students, the design of instructional programs which encourage practice with a broad range of strategies would seem important. Similarly, the physical set-up of the classroom can encourage certain types of interaction, in those classrooms where children are seated around a table, for example, there may be a greater tendency for peers to teach one another and to sustain communicative episodes. Also this type of situation, when including the teacher, appeared to be most effective in involving children with limited English proficiency in using their second language.

It may be that the strategies investigated in this study are at the elementary end of a spectrum of interaction strategies. As children become more proficient in a language or the experiences of the classroom become more cognitively demanding, children may acquire appropriate interaction strategies for dealing with those demands in a manner as consistent as they developed those investigated in this study.

## BIBLIOGRAPHY


Bakker-Rennes, H. and Hoefnagel-Hohle, M. Situatie verschillen in taalgebruik (Situational differences in language use). M.A. Thesis University of Amsterdam, 1974.

Bates, E. Peer relations and the acquisition of language. In Lewis, M and L Rosenblum (Eds.) Friendship and peer relations. New York: John Wiley&Sons, 1975.

Bialystok, E. The role of conscious strategies in second language proficiency. Modern Language Journal, 65, 1981: 24-35.

Borman, K. Children's interactions on playgrounds. Theory Into Practice, 18, 1979: 251-257.

Bruck, M. and Shultz, J. An ethnographic analysis of the language use patterns of bilingually schooled children. In Working Papers on Bilingualism, No. 13 Toronto: Ontario Institute for Studies in Education, 1977.

Burt, M. et al. Bilingual syntax measure: Technical handbook. New Jersey: Harcourt, Brace,and Jovanovich, 1976.

Carrasco, R. et al. Aspects of bilingual students' communicative competence in the classroom: A case study. In Duran, R. (Ed.) Latino language and communicative behavior. Norwood, N.J: Ablex, 1981: 237-251.

Cazden, C. et al. You all gonna hafta listen: Peer teaching in a primary classroom. In Collins, W. (Ed.) Children, language and communication. Hillsdale, N.J: Lawrence Erlbaum Assoc., 1977.

Cazden, C. The neglected situation in child language research and education. In Lee, V. (Ed.) Language development. New York: John Wiley & Sons, 1979.

Chesterfield, R. et al. Final report. An evaluation of the Head Start bilingual bicultural curriculum development project. Los Angeles: Juarez and Associates, Submitted to the Administration for Children Youth and Families, 1982.

Cicourel, A. Cognitive sociology: Language and meaning in social interaction. New York: Free Press, 1974

Cole, M. et al. Situational variability in the speech of preschool children. Annals of the New York Academy of Sciences. 1978.

Cooper, C. et al. Children's discourse during peer learning in experimental and naturalistic situations. Discourse Processes, 5, 1982: 177-191.

Corsaro, W. We're friends right: Children's use of access rituals in a nursery school. Language in Society, 8, 1979: 315-336.

Dore, J. Children's elocutionary acts. In Freedle, R. (Ed.) Discourse production and comprehension. Norwood, N.J: Ablex, 1977.

Duran, R. (Ed.) Latino language and communicative behavior. Norwood, N.J: Ablex, 1981.

Garfinkel, H. Studies in ethnomethodology. Englewood Cliffs, N.J: Prentice Hall, 1974.

Genishi, C. Rules for code-switching in young Spanish-English speakers. Unpublished doctoral dissertation. University of California at Berkeley, 1976.

Genishi, C. Codeswitching in chicano six-year-olds. In Duran, R. (Ed.) Latino language and communicative behavior. Norwood, N.J: Ablex, 1981.

Hall, W. et al. Variations in young children's use of language. In Freedle, R. (Ed.) Discourse production and comprehension. Norwood, N.J: Ablex, 1977.

Labov, W. Narrative analysis. In Language in the inner city: Studies in the Black English vernacular. Philadelphia: University of Pennsylvania Press, 1977.

Legarreta, D. An analysis of teacher talk and pupil talk in bilingual classrooms. Unpublished manuscript. University of California at Berkeley, 1975.

Lozano, A. English learning strategies of a Spanish dominant child. The Bilingual Review, 7,1980: 195-202.

Mehan, H. Learning lessons. Cambridge: Harvard University Press, 1979.

Merritt, M. Repeats and reformulations in primary classrooms as windows of nature of talk engagement. Discourse Processes, 5, 1982: 127-145.

Moll, L. The microethnographic study of bilingual schooling. In Padilla, R. (Ed.) Bilingual Education Technology. Ypsilanti: Eastern Michigan University, 1981: 430-446.

Narvaez, D. Sharing social meaning in the bilingual classroom: A study of requests. Paper presented at AERA annual meeting, Los Angeles, April, 1981.

Rubin, J. What the good language learner can teach us. TESOL Quarterly, 9, 1975: 41-51.

Rubin, J. Study of cognitive processes in second language learning. Applied Linguistics, 2, 1981: 117-131.

Schegloff, E. et al. The preference for self-correction in the organization of repair in conversation. Language, 53, 1977: 361-382.

Schwartz, H. and Jacobs, J. Qualitative sociology: A method to the madness. New York: Free Press, 1979.

Shultz, J. Language use in bilingual classrooms. Unpublished manuscript. Harvard Graduate School of Education, 1975.

Sinclair, A. and Coulthard, R. Towards an analysis of discourse. London: Oxford University Press, 1975.

Snow, C. Conversations with children. In Fletcher, P. and M. Garmen, (Eds.) Language Acquisition: Studies in first language development. Cambridge: Cambridge University Press, 1979.

Speier, M. The everyday world of the child. In Douglas, J. (Ed.) Understanding everyday life. Chicago: Aldine, 1970.

Steinberg, Z. and Cazden, C. Children as teachers--of peers and ourselves. Theory Into Practice, 18, 1979: 258-266.

Stovall, M. Strategies of communication in ESL learners. Paper presented Second Language Research Forum, Los Angeles, 1977.

Tarone, E. et al. A closer look at some interlanguage terminology: A framework for communication strategies. Working Papers on Bilingualism, 8, Toronto: Ontario Institute for Studies in Education, 1976.

Tarone, E. Communication strategies, foreigner talk, and repair in interlanguage. Language Learning, 30, 1980: 417-431.

Valdes, G. Codeswitching as deliberate verbal strategy: A microanalysis of direct and indirect requests among bilingual chicano speakers. In Duran, R. (Ed.) Latino language and communicative behavior. Norwood, N.J: Ablex, 1981: 70-95.

U. S. Department of Commerce: Bureau of the Census. 1980 census of population and housing, advance reports. PHC-80-V-45. March, 1981.

Wells, G. Variation in child language. In Lee, V. (Ed.) Language Development. New York: John Wiley & Sons, 1979

Wilkinson, L. et al. Ya wanna trade - just for a while: Children's requests and responses to peers. Discourse Processes, 5. 1982: 161-176.

Wong Fillmore, L. The second time around: Cognitive and social strategies in second language acquisition. Unpublished doctoral dissertation. University of California at Berkeley, 1976.

# APPENDIX A

## TYPOLOGY OF COMMUNICATION STRATEGIES

## APPENDIX A

### TYPOLOGY OF COMMUNICATION STRATEGIES

| Strategy | Example |
|---|---|
| Language Switch: revert to native language to substitute for unknown words and phrases. | Justin hands a card to another child, asks, "Who gots the -- ¿como se dice cuchillo?" |
| Literal translation: the child translates word for word from the native language or uses false cognates. | Doris, noting the small quantity of crayons in her classmate's box, comments, "You got a little bit of color". Pele retorts, "So!" Doris adds, "I got a bunch". |
| Message abandonment: the child begins to say something, but, lacking the appropriate structure, stops in mid-utterance. | Justin holding up a flashcard with a drawing of a frying pan, asks, "Who gots--" and not knowing the name of the object, waves the card around. |
| Formulaic expression/prefabricated utterance: units of language (words or phrases) which function as unanalyzed automatic units for the speaker, often giving the impression one knows the target language. | Ivette borrows another crayon from Edie, picks out a chartreuse one, and says as she returns down the aisle, "I'm gonna--I'm gonna' color it this color". |
| Repetition/Incorporation: echoing/imitation of an item modelled by another or incorporation of a word or structure of another into one's own speech. | When the aide corrects someone else, saying "only" in a correcting tone, Irene repeats, "Only". |
| Appeal for assistance: child asks for the correct term or structure, or for help in solving a problem. | Minga, opening her math book to a page requiring matching the time with the numbers, asks, "What do we do here, Rene?" She receives no response and calls to Rene again. |

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| Memorization: recall in a rote manner songs, rhymes, or sequence of numbers as a device for remembering. | The teacher has Ana count the children by sending her around their circle. Ana counts them in English going around the circle and putting her hand on each head as she counts. |
| Monitoring/Self Correction: Recognition and verbal correction of one's own error in vocabulary, style grammar, etc. | When the teacher goes to her desk to check some papers, Maricela says, "Miss"; she walks to the teacher's desk adding, "Miss, Miss, I need some pencil--a pencil". |
| Circumlocution: describe the characteristics of an item due to the lack of knowledge of the appropriate word or structure. | Ernesto, referring to the plant world unit to be studied in science, asks the teacher why she did not tell him "about that thing we were on". The teacher responds, "The plant world unit", and mentions that it is the next unit in the science book. |
| Pidginization: incipient English pattern that lacks significant semantic or structural information and can only be understood by context. | Julio, looking at a picture of Charlie Brown holding a bat and a ball, recalls that they played "con el bate". The teacher asks when they event occurred. Julio replies, "En bunny". The teacher deciphers, "En el Easter picnic". |
| Talks to self: child engages in verbal behavior directed to him/herself. | Ernesto, solving his math problems, counts on his fingers, saying to himself, "Five take away two", then, "One, two three, four", as he counts the remaining four problems. |
| One word answer: provides information, often in response to a question, using the minimal amount of language (in situations in which more than one word would be appropriate). | The teacher asks Adiana about her Halloween picture saying, "Tell me about it". Adriana replies, "Ghosts". The teacher asks, "What are the ghosts going to do?"; Adriana replies, "Scare". |

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| Elaboration: responds to a question with additional information than that requested or spontaneously adds information not solicited by another. | Ernesto and Bobby converse at their desks. Bobby asks, "How ya' gonna' take a bath?" and Ernesto responds, "Ya'll have a bad house, man". Bobby adds, And if the mouse comes?" Ernesto, "No...in a storm. At night I could come in there and then go all around". |
| Request for clarification: does not understand and asks speaker to repeat. | Lala asks for the time. Ivette asks, "Lala, ¿que quieres?" and Lala says, "What time is it?". Ivette requests, "What?" and Lala repeats, "What time is it?". |
| Onomatopoeia: imitates the sounds of an object. | As the music begins, Marisol sings, "Ooo-Ooo-Ooo" with they tape like the wind blowing through leaves, then claps as the Halloween music begins. |
| Story telling: relates an incident. | Alberto begins telling an event to the teacher, "Then one time my sister cut her finger with a knife and my mom put a bandage". |
| Role plays: takes on the role of another; fantasy plays. | Ivette and Lala, holding up the puppets they have just made, carry on reciting lines while moving the puppets:<br>Ivette: Hello, Lala.<br>Lala: Knock, knock.<br>Ivette: Who is?<br>Lala: Eenie, meenie. (Both of them laugh.) |
| Changes topic: takes the conversation in a distinct direction than the subject under discussion. | The teacher having asked a question and gotten a correct response from Dominga, now asks whether she circled the correct item on her page of the workbook. Dominga, changing the topic, says, "Miss, you didn't get a candy?", in reference to rewards to those who provide correct answers. |

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|---|---|
| Verbal attention getters: any verbal means by which child attracts attention of another to him/herself. | Marta calls to the teacher, "Miss" four times increasing her volume a little to no avail as the teacher directs another child and does not see her. |
| Answers aloud in unison: responds by providing the answer aloud with other children. | As the teacher asks how many hands people have, Marisol answers, "Two", in unison with others. |
| Anticipatory answer: an utterance which provides a response for an anticipated question or prematurely fills in a word in another's statement. | The teacher, holding flashcards, begins, "When you put 'st' in front--<br>Marta interjects, "Stop" interrupting the teacher before she finishes. The teacher continues her sentence "--of it - stop" and writes the word 'stop' on the board. |
| Reads aloud to self: reads text to him/herself. | As Ivette copies the sentence from the board, she says to herself, "The date is May". Looking at the second sentence the aide has written, she reads, "The month is--", as she copies it on her paper. |
| Corrects others/Teaches: perceives the perfor- of another as inadequate and offers the correct information. | Marisol moves around her desk gently shoving her way in between a boy and the aide who assists him. After looking at his paper for a few seconds, Marisol says, "That's not ten", and offers the correct answer. |
| Selective memorization: child recites only selected words or parts of a memorized sequence. | Esteban, standing by his desk, recites the Pledge of Allegiance then begins singing 'My Country Tis of Thee' although joining in mainly on the last part of the line, "let freedom ring". |
| Word play: the nonliteral use of language, used without the usual rules, for purposes of play. | Ernesto, joining a group at a table, overhears Eluid talk about a 'chile' candy they just received. Ernesto comments, "Eluid said chichi. Ves, by chilo, by chiloto, by chilito, by chile", playing with words. |

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|---|---|
| Avoidance: does no respond or talk about concepts for which the vocabulary or other meaning structure is unknown. | When the teacher asks, "How many cups in a pint?", Dominga gives no response. |
| Listening: does not join in a conversation but shows nonberbal cues of intent listening. | Adriana sits sideways at her desk watching the teacher working with a group at the adjacent small group table. The teacher asks for words that begin with a 'c'. Adriana mouths a word as if offering someone an answer. The teacher, noting that Adriana is not on task says, "Adriana, get busy", but the latter keeps watching the group and mouths still another word. |
| Imitation of another's behavior: after observing the actions of another, child copies and engages in indentical behavior. | Maricela sits at the lunch table, balancing an orange rind on her head, imitating Armando's antics who had earlier set an orange on his head as his hat. |
| Mime: uses nonverbal means to get point across. | As the teacher holds up a card with the skunk drawing, Sara says, "Skunk" then holds her nose and grimaces. |
| Identification: child points to a concrete object. | Enrique, calling the teacher's attention to the bean sprouts which other children have brought in, asks the teacher why she had not told him about these. The teacher asks, "About what?". Enrique points to the bean sprouts and says, "That". |
| Demonstration: show function of an object or concept. | The teacher asks, "How do an osprey's wings go?". Susan, and others, attempt arm movements to demonstrate how the wings are moved. |
| Nonverbal attention getter: any nonverbal means by which a child attracts the attention of another to him/herself. | Marta eagerly waves her hand above her head to volunteer; the teacher calls on her to proceed to the front of the room. |

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|---|---|
| Prefabricated behavior: engages in ritualized behavior regularly elicited by a specific context. | The teacher prepares the class for a spelling test by handing out half-sheets of paper. Esteban takes his sheet, passes the others back, then automatically begins writing his name on his paper. |
| Writes sound or word: child produces written text. | Esteban, at his desk copying the sentences off the board, erases the word 'pupa' at the end of the line and puts it on the next line, trying to match exactly the way the teacher has the sentences written on the board. |
| Checking work/Copying: child examines his/her own work or others for information. | Lala writes 'house' on her page as she spells the word aloud. Maricela copies the word as she looks over the former's shoulder. |
| Self-correcting (written): erases and corrects a written error. | Esteban erases a misspelled 'teh' and writes 'the' in its place. |
| Mouths: moves one's lips without verbalizing. | The teacher asks, "What are the days of the week?" Most of the children rattle off the names mechanically, but Esteban mouths the words, "Saturday" and "Thursday" only. |
| Corrects/Teaches (nonverbal): by using gestures or modelling appropriate behavior, the child conveys new information to or indicates the error of another. | A girl wanders from across the room to Miguel's desk and hands him a paper popper thus requesting that he show her how to use it. Miguel, without saying anything, demonstrates how to snap the popper then hands it back to the girl who returns to her desk. |
| Working ahead: nonverbal anticipatory answer. | The teacher works with a small group on their math problems calling on a boy to read the first story problem. Julio writes out a math problem in number style. The teacher then says that they are to translate the written problem into a number problem. |

# APPENDIX B

## SUMMARY CHARACTERISTICS OF THE COMMUNICATIVE EPISODE BY EXPERIMENTAL AND CONTROL PAIRS

APPENDIX B

SUMMARY CHARACTERISTICS OF THE COMMUNICATIVE EPISODE BY EXPERIMENTAL AND CONTROL PAIRS

CORPUS CHRISTI

| | Sequence vs Nonsequence | | | | Target vs Other | | | | Average Number of Turns | | | | Strategies vs Functions | | | | Strategies | | | | Diversification of Strategies | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | I | II | III | IV | I | II | III | IV | I | II | III | IV | I | II | III | IV | I E S CS NV | II E S CS NV | III E S CS NV | IV E S CS NV | I E S NV T | II E S NV T | III E S NV T | IV E S NV T |
| Ramona | 26-74 | 26-74 | 54-46 | 43-57 | 56-44 | 57-43 | 21-79 | 14-86 | 2.2 | 2.4 | 2.5 | 2.4 | 53-46 | 76-24 | 42-58 | 33-67 | 26-37- 0-37 | 44- 0-0-56 | 62- 2-0-36 | 55- 5-0-40 | 7- 6- 5-12 | 6- 0- 7-13 | 11- 2- 4-13 | 10- 1- 6-16 |
| Ramón | | | 43-57 | 36-64 | | | 41-59 | 41-59 | | | 2.0 | 2.0 | | | 44-56 | 54-46 | | | 50- 5-9-36 | 76- 0-0-34 | | | 13- 3- 7-10 | 12- 0- 5-17 |
| Julio | 37-63 | 52-48 | 38-62 | 42-58 | 53-50 | 61-39 | 41-59 | 50-50 | 1.9 | 1.8 | 2.2 | 2.5 | 51-49 | 41-59 | 49-51 | 52-48 | 17-48- 9-26 | 24-41-15-20 | 71- 0-0-29 | 73- 0-0-27 | 11- 6- 6-15 | 11- 7- 5-15 | 12- 0- 8-19 | 11- 0- 6-17 |
| Vicky | | | 37-63 | 32-68 | | | 24-76 | 39-61 | | | 2.0 | 2.2 | | | 43-57 | 66 [illegible] | | | 50- 0-0-50 | 82- [illegible] | | | 9- 0-10-19 | 11- 0- 6-17 |
| Ricardo | 50-50 | 25-75 | 38-62 | 26-74 | 21-79 | 50-50 | 26-74 | 44-56 | 1.1 | 2.5 | 2.1 | 2.0 | 56-44 | 46-54 | 51-49 | 41-59 | 44-44- 0-12 | 82- 6-0-12 | 54- 5-0-41 | 69- 1-1-29 | 2- 0- 0- 6 | 0- 1- 1-10 | 11- 1- 8-19 | 13- 1- 9-21 |
| Jimmy | | | 44-56 | 36-64 | | | 34-66 | 52-48 | | | 2.2 | 2.1 | | | 53-47 | 47-53 | | | 74- 0-0-26 | 80- 2-2-16 | | | 15- 0- 6-21 | 10- 1- 9-22 |
| Lorenzo | 41-59 | 24-76 | 33-67 | 29-71 | 59-41 | 59-41 | 49-51 | 51-49 | 1.9 | 1.6 | 1.6 | 1.7 | 37-63 | 55-45 | 44-56 | 40-60 | 35-41- 0-23 | 55- 9-4-32 | 67- 7-0-26 | 71- 0-0-29 | 3- 3- 0- 6 | 7- 2- 2-20 | 13- 3- 6-10 | 14- 0- 6-20 |
| Francisco | | | 31-69 | 39-61 | | | 32-68 | 45-55 | | | 2.1 | 2.1 | | | 45-55 | 47-53 | | | 64- 0-0-36 | 76- 0-0-24 | | | 10- 0- 8-10 | 15- 0- 8-24 |
| Doris | 36-64 | 32-68 | 29-71 | 38-62 | 43-57 | 38-62 | 60-40 | 30-70 | 2.1 | 1.9 | 2.3 | 1.8 | 58-42 | 45-55 | 49-51 | 34-66 | 53-19- 5-22 | 50-13-0-37 | 69- 0-0-31 | 75- 0-0-25 | 9- 4- 4-11 | 7- 3- 4-14 | 13- 0- 9-22 | 12- 0- 7-19 |
| Juanita | | | 31-69 | 34-66 | | | 50-50 | 47-53 | | | 1.9 | 2.3 | | | 40-60 | 55-45 | | | 58- 4-0-38 | 71- 1-0-28 | | | 8- 1- 5-13 | 14- 1- 8-20 |
| Gregorio | 18-82 | 32-68 | 29-71 | 28-72 | 49-51 | 32-68 | 33-67 | 25-75 | 3.0 | 1.4 | 1.9 | 2.1 | 40-60 | 37-63 | 48-52 | 45-55 | 68- 0- 4-28 | 80- 7-0-13 | 45- 0-2-53 | 53- 0-0-47 | 7- 0- 5-11 | 6- 1- 2- 8 | 7- 0- 9-16 | 13- 0- 9-16 |
| Mike | | | 26-74 | 28-72 | | | 43-57 | 51-49 | | | 2.3 | 2.3 | | | 47-53 | 41-59 | | | 65- 0-0-35 | 55- 0-0-45 | | | 10- 0- 6-16 | 13- 0- 7-20 |
| Ruth | 38-62 | 51-49 | 35-65 | 29-71 | 63-37 | 62-38 | 30-70 | 34-66 | 2.0 | 2.1 | 1.9 | 1.4 | 59-41 | 64-36 | 35-65 | 39-61 | 77- 7- 2-14 | 74- 7-0-19 | 57- 2-0-41 | 66- 2-0-32 | 11- 2- 0-10 | 10- 2- 3-13 | 9- 1- 7-16 | 10- 1- 3-13 |
| Ismael | | | 39-61 | 40-60 | | | 29-71 | 36-64 | | | 2.2 | 2.1 | | | 44-56 | 54-46 | | | 70- 0-0-30 | 67- 0-0-30 | | | 9- 0- 5-14 | 8- 0- 8-16 |

EAST LOS ANGELES

| | Sequence vs Nonsequence | | | | Target vs Other | | | | Average Number of Turns | | | | Strategies vs Functions | | | | Strategies | | | | Diversification of Strategies | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | I | II | III | IV | I | II | III | IV | I | II | III | IV | I | II | III | IV | I E S CS NV | II E S CS NV | III E S CS NV | IV E S CS NV | I E S NV T[1] | II E S NV T[1] | III E S NV T[1] | IV E S NV T[1] |
| Alberto | 40-60 | 30-70 | 40-60 | 33-67 | 50-50 | 40-60 | 48-52 | 50-50 | 3.5 | 3.3 | 2.1 | 2.4 | 65-35 | 44-56 | 53-47 | 55-45 | 53-17-13-13 | 30-40-17-13 | 72- 3- 0-23 | 76- 3- 0-21 | 8- 4- 3-14 | 7- 5- 3-12 | 14- 2- 6-20 | 15- 3- 8-23 |
| Crispín | | | 50-50 | 68-32 | | | 27-73 | 34-66 | | | 2.3 | 3.4 | | | 62-38 | 40-60 | | | 67- 4- 0-29 | 65- 0- 0-35 | | | 10- 2- 7-17 | 19- 0- 8-27 |
| Marisol | 100-0 | 100-0 | 61-39 | 53-47 | 100-0 | 0-100 | 33-67 | 48-52 | 1.0 | 3.0 | 2.5 | 3.0 | 0-100 | 33-67 | 53-47 | 44-56 | 0 | 100 | 7-49- 0-44 | 16-42- 0-42 | 0 | 1 | 9- 4- 8-17 | 7- 9-12-24 |
| Bárbara | | | 53-47 | 57-43 | | | 31-69 | 39-61 | | | 3.2 | 2.6 | | | 56-44 | 45-55 | | | 33-29- 9-29 | 55-12-14-29 | | | 11-10- 0-22 | 13- 6- 0-20 |
| Reynaldo | 80-20 | 33-67 | 49-51 | 47-53 | 20-80 | 13-87 | 45-55 | 38-62 | 2.0 | 4.0 | 1.7 | 3.5 | 80-20 | 69-31 | 65-35 | 44-56 | 0-50- 0-50 | 22-22- 0-55 | 34-19- 0-47 | 51-20- 1-28 | 0- 1- 3- 4 | 2- 2- 2- 5 | 6- 4- 9-18 | 20-11-10-30 |
| Cándido | | | 48-52 | 48-52 | | | 34-66 | 31-69 | | | 2.3 | 2.8 | | | 57-43 | 44-56 | | | 69- 4- 1-27 | 54- 1- 0-45 | | | 16- 3- 0-24 | 12- 1- 9-21 |
| Alicia | 27-73 | 40-60 | 24-76 | 43-57 | 47-53 | 10-90 | 38-62 | 35-65 | 3.3 | 5.0 | 2.3 | 3.3 | 64-36 | 64-36 | 59-41 | 38-62 | 6-44-25-25 | 7-43-28-21 | 29-44- 0-27 | 24-27- 0-49 | 1- 4- 2- 6 | 1- 3- 1- 5 | 0-10- 0-21 | 7- 9- 0-19 |
| Roberto | | | 51-49 | 50-50 | | | 42-58 | 45-55 | | | 1.9 | 2.8 | | | 57-43 | 52-48 | | | 5-39- 7-59 | 22-26- 4-48 | | | 5-10- 7-18 | 11- 7-10-28 |
| Ernesto | 80-20 | 60-40 | 57-43 | 38-62 | 20-80 | 40-60 | 35-65 | 48-52 | 2.0 | 3.3 | 2.2 | 3.2 | 55-45 | 60-40 | 55-45 | 51-49 | 70-20- 0-10 | 30-44- 0-26 | 21-50- 4-25 | 30-44- 0-22 | 1- 1- 1- 3 | 3- 0- 3- 6 | 7-11-11-22 | 11-15- 9-24 |
| Justin | | | 47-53 | 61-39 | | | 32-68 | 52-48 | | | 2.4 | 3.1 | | | 62-38 | 54-46 | | | 41-36- 0-23 | 54-29- 1-17 | | | 14- 9-10-26 | 10-13- 8-31 |
| Susan | 40-60 | 42-58 | 56-44 | 56-44 | 53-47 | 58-42 | 51-49 | 50-50 | 1.2 | 3.0 | 3.0 | 3.0 | 33-67 | 71-29 | 73-27 | 54-46 | 71- 0- 0-29 | 86- 0- 0-14 | 76- 0- 1-23 | 74- 1- 0-25 | 3- 0- 2- 5 | 5- 0- 2- 7 | 17- 0- 9-25 | 15- 1- 8-24 |
| Judy | | | 56-44 | 53-47 | | | 24-76 | 36-64 | | | 2.6 | 3.3 | | | 49-51 | 37-63 | | | 62- 0- 8-30 | 49- 0- 0-51 | | | 15- 1- 6-21 | 9- 0- 7-16 |
| Carmen | 60-40 | 62-38 | 50-50 | 57-43 | 47-53 | 48-52 | 39-61 | 41-59 | 3.3 | 3.7 | 2.5 | 2.4 | 47-53 | 48-52 | 58-42 | 41-59 | 88- 0- 0-12 | 77- 3- 0-20 | 73- 0- 0-27 | 75- 0- 0-25 | 5- 0- 0- 1 | 9- 1- 4-13 | 14- 0-10-24 | 12- 0- 8-20 |
| Lea | | | 42-58 | 53-47 | | | 37-63 | 42-58 | | | 2.3 | 2.8 | | | 60-40 | 51-49 | | | 75- 2- 1-22 | 65- 4- 0-31 | | | 13- 2- 8-20 | 12- 4- 9-21 |

RIO GRANDE CITY

| | Sequence vs Nonsequence | | | | Target vs Other | | | | Average Number of Turns | | | | Strategies vs Functions | | | | Strategies | | | | Diversification of Strategies | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | I | II | III | IV | I | II | III | IV | I | II | III | IV | I | II | III | IV | I E S CS NV | II E S CS NV | III E S CS NV | IV E S CS NV | I E S NV T* | II E S NV T* | III E S NV T* | IV E S NV T* |
| Esteban | 38-62 | 39-61 | 50-60 | 42-58 | 38-62 | 37-63 | 40-60 | 35-65 | 2.0 | 2.5 | 2.6 | 2.6 | 53-47 | 48-52 | 51-49 | 55-45 | 10-66- 0-24 | 30-52- 0-18 | 49- 8- 2-40 | 42-13- 1-44 | 2- 8- 5-14 | 4- 7- 3-12 | 12- 3-11-23 | 10- 7- 9-20 |
| Domingo | | | 54-46 | 39-61 | | | 27-73 | 46-54 | | | 2.9 | 2.6 | | | 45-55 | 42-58 | | | 60- 3- 1-36 | 63-11- 0-26 | | | 13- 3- 8-20 | 20- 5- 9-30 |
| Miguel | 20-80 | 41-59 | 40-60 | 41-59 | 62-38 | 49-51 | 58-42 | 45-55 | 1.9 | 2.0 | 2.1 | 2.6 | 45-55 | 68-32 | 50-50 | 43-57 | 11-67- 0-22 | 13-66- 3-21 | 26-31- 3-38 | 35-16- 4-45 | 6- 6- 2- 9 | 7-11- 5-18 | 11-11- 6-20 | 9- 9- 8-18 |
| Raimundo | | | 53-47 | 47-53 | | | 34-66 | 29-71 | | | 2.4 | 2.7 | | | 60-40 | 42-58 | | | 44-26- 1-29 | 39-39- 4-20 | | | 12-12- 9-21 | 16-11- 7-21 |
| Carlos | 24-76 | 47-53 | 37-63 | 38-62 | 36-64 | 29-71 | 49-51 | 47-53 | 1.2 | 1.8 | 2.8 | 2.9 | 36-64 | 44-56 | 46-54 | 43-57 | 19-56- 0-25 | 17-34- 3-45 | 17-23- 2-57 | 20-25- 7-49 | 2- 6- 2- 9 | 4- 5- 3-11 | 6- 6-10-20 | 11-11-11-24 |
| Jorge | | | 54-46 | 57-43 | | | 39-61 | 27-73 | | | 2.3 | 2.7 | | | 44-56 | 50-50 | | | 19-21- 0-60 | 18-29- 1-51 | | | 7- 7- 8-18 | 9-10- 9-21 |
| Adriana | 17-83 | 32-68 | 50-50 | 47-53 | 42-58 | 64-36 | 46-54 | 48-52 | 1.7 | 1.4 | 2.5 | 2.7 | 66-34 | 69-31 | 62-38 | 43-57 | [illegible]- 6-21 | 52-28- 8-12 | 76- 5- 1-18 | 59- 7- 2-32 | 5- 5- 5-12 | 4- 6- 2-11 | 16- 5- 9-23 | 10- 0- 8-20 |
| Jaime | | | 56-44 | 46-54 | | | 44-56 | 36-64 | | | 2.3 | 2.3 | | | 53-47 | 48-52 | | | 21-31- 3-45 | 35-14- 1-50 | | | 11-12-17-28 | 12- 8- 9-23 |
| Ivette | 42-58 | 43-57 | 32-68 | 35-65 | 40-60 | 39-61 | 53-47 | 43-57 | 1.4 | 1.4 | 2.8 | 2.5 | 41-59 | 61-39 | 60-40 | 48-52 | 26-54- 4-15 | 50-35- 5-10 | 72- 5- 2-22 | 54-10- 6-30 | 6- 4- 3-12 | 4- 4- 2- 8 | 24- 7- 9-30 | 25- 6-11-20 |
| María | | | 42-58 | 43-57 | | | 38-62 | 36-64 | | | 2.5 | 2.4 | | | 60-40 | 57-43 | | | 53-17- 0-30 | 58-14- 1-27 | | | 13- 9- 9-24 | 10-10-11-30 |
| Bonita[1] | 44-56 | 33-67 | 35-65 | 43-57 | 48-52 | 37-63 | 53-47 | 50-50 | 2.0 | 1.9 | 2.4 | 2.5 | 46-54 | 55-45 | 51-49 | 48-52 | 59-32- 8-10 | 32-38-14-16 | 62-23- 2-32 | 39-30- 4-27 | 12- 8- 4-17 | 9- 7- 4-16 | 14-10- 0-22 | 10-12- 0-25 |
| Janet | 29-71 | 38-62 | 48-52 | 38-62 | 37-63 | 50-50 | 37-63 | 44-56 | 2.1 | 1.2 | 2.8 | 2.3 | 61-39 | 58-42 | 69-31 | 50-50 | 50-40- 0- 3 | 31-35- 0-27 | 49-13- 1-37 | 49-20- 1-30 | 8- 7- 0-10 | 11- 9- 6-19 | 12- 7-10-28 | 10-10- 7-27 |
| Marcela | | | 52-48 | 54-46 | | | 51-49 | 52-48 | | | 2.7 | 2.6 | | | 47-53 | 46-54 | | | 62- 3- 1-34 | 62- 8- 5-80 | | | 18- 4- 2-11 | 10- 3- 8-25 |
| Enrique[1] | 51-49 | 39-61 | 39-61 | 39-61 | 37-63 | 58-42 | 49-51 | 49-51 | 1.4 | 1.7 | 2.2 | 2.6 | 61-39 | 71-29 | 53-47 | 59-41 | 64-21- 3-11 | 68-25- 1- 7 | 62- 2- 3-33 | 56-21- 0-23 | 11- 6- 4-16 | 13- 6- 3-18 | 18- 4-11-29 | 17-11-11-29 |

[1] Includes all observed instances.

[2] No appropriate control child match was available for these children. They were, however, included in the analysis because of their special characteristics; Enrique was the lone English-speaking child at his site and Bonita was the only child at the same site who began Head Start as an SP-2.



BEST COPY AVAILABLE

# APPENDIX C

## ABSOLUTE FREQUENCIES OF COMMUNICATION EPISODES BY CONTEXT, MODE AND SPEECH PARTNER

APPENDIX C

ABSOLUTE FREQUENCIES OF COMMUNICATION

EPISODES BY CONTEXT, MODE AND SPEECH PARTNER

(SP I CHILDREN IN ENGLISH CLASSROOMS)

| | | Small Group | | | | | | Seat Work | | | | | | Large Group | | | | | | Recess | | | | | | Lunch | | | | | | Opening/Dismissal | | | | | | TOTAL | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | |
| | | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV |
| RAMONA | Adult | 0- | 50 | - 8 | 0- | 26 | - 1 | 0- | 5 | - 5 | 0- | 15 | - 2 | 0- | 17 | - 0 | 0- | 9 | - 1 | 0- | 0 | - 0 | 0- | 1 | - 0 | 0- | 1 | - 0 | 0- | 0 | - 1 | 0- | 10 | - 0 | 1- | 2 | - 0 | 0- | 84 | -13 | 1- | 54 | - 5 |
| | Peer | 0- | 0 | - 0 | 2- | 1 | - 0 | 3- | 2 | - 5 | 2- | 4 | - 1 | 2- | 0 | - 0 | 2- | 3 | - 1 | 1- | 0 | - 0 | 0- | 0 | - 0 | 0- | 1 | - 0 | 0- | 1 | - 0 | 0- | 2 | - 0 | 0- | 2 | - 0 | 6- | 5 | - 5 | 6- | 10 | - 2 |
| No one in Particular | | 0- | 0 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 0- | 1 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 0- | 1 | - 0 |
| | Total | 0- | 50 | - 8 | 2- | 27 | - 1 | 3- | 7 | -10 | 2- | 19 | - 3 | 2- | 17 | - 0 | 2- | 13 | - 2 | 1- | 0 | - 0 | 0- | 1 | - 0 | 0- | 2 | - 0 | 0- | 1 | - 1 | 0- | 12 | - 0 | 1- | 4 | - 0 | 6- | 89 | -18 | 7- | 65 | - 7 |
| JULIO | Adult | 0- | 14 | - 1 | 0- | 17 | - 0 | 0- | 13 | - 2 | 0- | 18 | - 0 | 0- | 20 | - 4 | 0- | 21 | - 0 | 0- | 3 | - 0 | 0- | 2 | - 0 | 0- | 2 | - 0 | 0- | 1 | - 0 | 0- | 6 | - 0 | 0- | 2 | - 0 | 0- | 58 | - 7 | 0- | 61 | - 0 |
| | Peer | 0- | 0 | - 0 | 0- | 3 | - 0 | 0- | 30 | - 4 | 0- | 13 | - 0 | 0- | 1 | - 0 | 0- | 1 | - 1 | 0- | 3 | - 0 | 0- | 9 | - 0 | 0- | 6 | - 0 | 0- | 4 | - 0 | 0- | 1 | - 0 | 0- | 1 | - 0 | 0- | 41 | - 5 | 0- | 31 | - 2 |
| No one in Particular | | 0- | 0 | - 0 | 0- | 2 | - 0 | 0- | 3 | - 1 | 0- | 9 | - 0 | 0- | 0 | - 0 | 0- | 2 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 0- | 2 | - 0 | 0- | 0 | - 0 | 0- | 1 | - 0 | 0- | 1 | - 0 | 0- | 6 | - 1 | 0- | 14 | - 0 |
| | Total | 0- | 14 | - 1 | 0- | 22 | - 0 | 0- | 46 | - 7 | 0- | 40 | - 0 | 0- | 21 | - 4 | 0- | 24 | - 1 | 0- | 6 | - 0 | 0- | 11 | - 0 | 0- | 10 | - 0 | 0- | 5 | - 0 | 0- | 8 | - 0 | 0- | 4 | - 0 | 0-105 | | -13 | 0-106 | | - 2 |
| VICTY | Adult | 0- | 20 | - 7 | 0- | 12 | - 1 | 0- | 12 | - 1 | 0- | 14 | - 8 | 0- | 28 | - 3 | 0- | 18 | - 0 | 0- | 2 | - 0 | 0- | 2 | - 1 | 0- | 0 | - 0 | 0- | 1 | - 0 | 0- | 3 | - 0 | 0- | 3 | - 0 | 0- | 65 | -11 | 0- | 50 | -10 |
| | Peer | 0- | 1 | - 0 | 0- | 0 | - 0 | 0- | 16 | - 4 | 0- | 12 | - 6 | 0- | 6 | - 1 | 0- | 1 | - 0 | 0- | 2 | - 1 | 1- | 1 | - 2 | 0- | 1 | - 0 | 0- | 2 | - 1 | 0- | 0 | - 0 | 0- | 1 | - 1 | 0- | 26 | - 6 | 1- | 17 | -10 |
| No one in Particular | | 0- | 1 | - 2 | 0- | 0 | - 0 | 0- | 0 | - 3 | 0- | 1 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 0- | 1 | - 0 | 0- | 1 | - 5 | 0- | 2 | - 0 |
| | Total | 0- | 22 | - 9 | 0- | 12 | - 1 | 0- | 28 | - 8 | 0- | 27 | -14 | 0- | 34 | - 4 | 0- | 19 | - 0 | 0- | 4 | - 1 | 1- | 3 | - 3 | 0- | 1 | - 3 | 0- | 3 | - 1 | 0- | 3 | - 0 | 0- | 5 | - 1 | 0- | 92 | -22 | 1- | 69 | -20 |
| RAMON | Adult | 0- | 17 | - 0 | 0- | 18 | - 1 | 0- | 8 | - 1 | 0- | 11 | - 0 | 0- | 10 | - 0 | 0- | 13 | - 1 | 0- | 4 | - 0 | 0- | 2 | - 0 | 0- | 3 | - 3 | 0- | 2 | - 0 | 0- | 9 | - 0 | 0- | 1 | - 0 | 0- | 51 | - 1 | 0- | 47 | - 2 |
| | Peer | 0- | 3 | - 0 | 0- | 0 | - 0 | 8- | 28 | - 7 | 0- | 14 | - 4 | 0- | 3 | - 0 | 0- | 0 | - 2 | 0- | 1 | - 1 | 0- | 2 | - 1 | 0- | 8 | - 1 | 1- | 2 | - 2 | 0- | 3 | - 0 | 0- | 4 | - 0 | 8- | 46 | - 9 | 1- | 22 | - 9 |
| No one in Particular | | 1- | 1 | - 1 | 0- | 0 | - 0 | 0- | 5 | - 0 | 0- | 1 | - 0 | 0- | 0 | - 0 | 0- | 3 | - 0 | 0- | 0 | - 0 | 0- | 2 | - 1 | 0- | 0 | - 0 | 0- | 1 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 1- | 6 | - 1 | 0- | 7 | - 1 |
| | Total | 1- | 21 | - 1 | 0- | 18 | - 1 | 8- | 41 | - 8 | 0- | 26 | - 4 | 0- | 13 | - 0 | 0- | 16 | - 3 | 0- | 5 | - 1 | 0- | 6 | - 2 | 0- | 11 | - 1 | 1- | 5 | - 2 | 0- | 12 | - 0 | 0- | 5 | - 0 | 9-103 | | -11 | 1- | 76 | -12 |
| CANDIDO | Adult | 0- | 23 | - 0 | 0- | 15 | - 1 | 0- | 17 | - 2 | 0- | 9 | - 1 | 0- | 11 | - 0 | 1- | 22 | - 3 | 0- | 5 | - 0 | 0- | 5 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 0- | 18 | - 0 | 0- | 3 | - 0 | 0- | 74 | - 2 | 1- | 54 | - 5 |
| | Peer | 0- | 5 | - 0 | 0- | 3 | - 4 | 3- | 18 | - 7 | 2- | 13 | - 2 | 0- | 3 | - 0 | 1- | 5 | - 2 | 1- | 12 | - 0 | 4- | 17 | - 2 | 1- | 12 | - 1 | 0- | 6 | - 0 | 0- | 2 | - 2 | 0- | 2 | - 0 | 5- | 52 | - 0 | 7- | 46 | -10 |
| No one in Particular | | 0- | 1 | - 0 | 0- | 0 | - 0 | 0- | 1 | - 0 | 0- | 1 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 0- | 2 | - 0 | 0- | 1 | - 0 |
| | Total | 0- | 29 | - 0 | 0- | 18 | - 5 | 3- | 36 | - 9 | 2- | 23 | - 3 | 0- | 14 | - 0 | 2- | 27 | - 5 | 1- | 17 | - 0 | 4- | 22 | - 2 | 1- | 12 | - 2 | 0- | 6 | - 0 | 0- | 20 | - 2 | 0- | 5 | - 0 | 5-128 | | - 2 | 8-101 | | -15 |
| IVETTE | Adult | 0- | 5 | - 0 | 0- | 17 | - 0 | 0- | 18 | - 2 | 0- | 14 | - 2 | 0- | 20 | - 0 | 2- | 33 | - 2 | 0- | 7 | - 1 | 1- | 0 | - 0 | 0- | 5 | - 0 | 0- | 4 | - 0 | 1- | 15 | - 0 | 0- | 21 | - 0 | 1- | 70 | - 2 | 3- | 89 | - 4 |
| | Peer | 0- | 3- | 2 | 0- | 4 | - 0 | 7- | 20 | - 5 | 24- | 34 | - 3 | 1- | 2 | - 0 | 4- | 8 | - 3 | 4- | 5 | - 6 | 5- | 26 | - 4 | 1- | 1 | - 0 | 7- | 2 | - 1 | 4- | 3 | - 1 | 5- | 2 | - 1 | 17- | 34 | -14 | 49- | 76 | -12 |
| No one in Particular | | 0- | 1 | - 1 | 0- | 0 | - 0 | 1- | 6 | - 1 | 0- | 4 | - 2 | 0- | 1 | - 1 | 0- | 0 | - 0 | 0- | 4 | - 0 | 0- | 2 | - 0 | 0- | 1 | - 0 | 0- | 0 | - 0 | 1- | 1 | - 1 | 0- | 3 | - 0 | 2- | 14 | - 4 | 0- | 9 | - 2 |
| | Total | 0- | 9 | - 3 | 0- | 21 | - 0 | 8- | 44 | - 8 | 24- | 52 | - 9 | 1- | 23 | - 1 | 6- | 41 | - 5 | 4- | 16 | - 6 | 6- | 28 | - 4 | 1- | 7 | - 0 | 7- | 6 | - 1 | 6- | 19 | - 2 | 5- | 26 | - 1 | 10-118 | | -20 | 48-174 | | -18 |
| ESTEBAN | Adult | 0- | 11 | - 1 | 0- | 14 | - 0 | 0- | 4 | - 2 | 0- | 6 | - 5 | 0- | 21 | - 2 | 4- | 27 | - 2 | 0- | 0 | - 0 | 1- | 0 | - 0 | 0- | 0 | - 0 | 1- | 1 | - 0 | 0- | 10 | - 0 | 0- | 15 | - 1 | 0- | 46 | - 5 | 6- | 63 | - 8 |
| | Peer | 0- | 0 | - 0 | 0- | 0 | - 0 | 6- | 7 | - 2 | 7- | [illegible] | - 1 | 0- | 1 | - 0 | 1- | 1 | - 0 | 9- | 1 | - 2 | 8- | 2 | - 5 | 1- | 0 | - 2 | 5- | 3 | - 4 | 2- | 0 | - 1 | 1- | 4 | - 2 | 18- | 9 | - 7 | 22- | 13 | -12 |
| No one in Particular | | 0- | 1 | - 1 | 0- | 0 | - 0 | 1- | 2 | - 0 | 2- | 1 | - 1 | 1- | 3 | - 0 | 1- | 0 | - 1 | 0- | 1 | - 1 | 1- | 0 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 0- | 1 | - 0 | 0- | 1 | - 0 | 2- | 8 | - 4 | 4- | 2 | - 2 |
| | Total | 0- | 12 | - 2 | 0- | 14 | - 0 | 7- | 13 | - 4 | 9- | 10 | - 7 | 1- | 25 | - 2 | 6- | 28 | - 3 | 9- | 2 | - 3 | 10- | 2 | - 5 | 1- | 0 | - 2 | 6- | 4 | - 4 | 2- | 11 | - 1 | 1- | 20 | - 3 | 20- | 63 | -14 | 32- | 78 | -22 |
| DOMINGA | Adult | 1- | 10 | - 0 | 0- | 13 | - 0 | 0- | 5 | - 1 | 0- | 7 | - 2 | 6- | 45 | - 1 | 0- | 32 | - 0 | 0- | 1 | - 2 | 0- | 1 | - 0 | 0- | 0 | - 1 | 0- | 0 | - 0 | 0- | 13 | - 0 | 1- | 15 | - 2 | 7- | 74 | - 5 | 1- | 68 | - 5 |
| | Peer | 0- | 0 | - 0 | 0- | 5 | - 0 | 4- | 3 | - 1 | 16- | 30 | - 6 | 1- | 0 | - 1 | 1- | 2 | - 2 | 5- | 2 | - 1 | 7- | 23 | - 4 | 0- | 0 | - 1 | 2- | 0 | - 3 | 1- | 1 | - 2 | 1- | 5 | - 2 | 11- | 8 | - 6 | 27- | 65 | -20 |
| No one in Particular | | 0- | 0 | - 0 | 0- | 1 | - 0 | 0- | 1 | - 3 | 0- | 2 | - 1 | 0- | 3 | - 0 | 0- | 2 | - 0 | 0- | 2 | - 1 | 0- | 1 | - 0 | 0- | 0 | - 0 | 0- | 1 | - 0 | 0- | 0 | - 0 | 0- | 1 | - 0 | 0- | 6 | - 4 | 0- | 8 | - 1 |
| | Total | 1- | 10 | - 0 | 0- | 19 | - 0 | 4- | 9 | - 5 | 16- | 39 | - 9 | 7- | 48 | - 2 | 1- | 36 | - 2 | 5- | 5 | - 4 | 7- | 25 | - 4 | 0- | 0 | - 2 | 2- | 1 | - 3 | 1- | 14 | - 2 | 2- | 21 | - 4 | 18- | 88 | -15 | 28-141 | | -26 |



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APPENDIX C continued

SP I CHILDREN IN BILINGUAL CLASSROOMS

| | | Small Group | | | | | | Seat Work | | | | | | Large Group | | | | | | Recess | | | | | | Lunch | | | | | | Opening / Dismissal | | | | | | TOTAL | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time I | | |
| | | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV |
| BARBARA | Adult | 0- | 10 | - 0 | 1- | 5 | - 1 | 2- | 3 | - 5 | 3- | 8 | - 0 | 3- | 15 | - 0 | 0- | 13 | - 4 | 0- | 1 | - 0 | 0- | 8 | - 0 | 0- | 1 | - 0 | 3- | 1 | - 0 | 0- | 11 | - 0 | 0- | 6 | - 0 | 5- | 41 | - 5 | 7- | 41 | - |
| | Peer | 0- | 1 | - 0 | 0- | 3 | - 1 | 21- | 12 | - 3 | 6- | 10 | - 5 | 4- | 0 | - 0 | 0- | 4 | - 5 | 7- | 2 | - 3 | 3- | 6 | - 3 | 4- | 1 | - 1 | 2- | 0 | - 0 | 1- | 1 | - 1 | 3- | 0 | - 0 | 37- | 17 | - 8 | 14- | 23 | -1 |
| No one in Particular | | 0- | 0 | - 0 | 0- | 1 | - 0 | 2- | 2 | - 0 | 1- | 3 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 0- | 1 | - 0 | 0- | 1 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 2- | 3 | - 0 | 1- | 5 | - |
| | Total | 0- | 11 | - 0 | 1- | 9 | - 2 | 25- | 17 | - 8 | 10- | 21 | - 5 | 7- | 15 | - 0 | 0- | 17 | - 9 | 7- | 3 | - 3 | 3- | 15 | - 3 | 4- | 3 | - 1 | 5- | 1 | - 0 | 1- | 12 | - 1 | 3- | 6 | - 0 | 44- | 61 | -13 | 22- | 69 | -1 |
| REYNALDO | Adult | 0- | 4 | - 3 | 7- | 9 | - 2 | 3- | 0 | - 0 | 7- | 4 | - 1 | 2- | 11 | - 0 | 4- | 9 | - 1 | 0- | 8 | - 0 | 0- | 1 | - 0 | 0- | 0 | - 1 | 0- | 0 | - 0 | 0- | 3 | - 0 | 2- | 3 | - 0 | 5- | 26 | - 4 | 20- | 26 | - |
| | Peer | 0- | 2 | - 1 | 0- | 0 | - 1 | 8- | 6 | - 2 | 15- | 8 | - 2 | 2- | 4 | - 1 | 3- | 1 | - 1 | 2- | 1 | - 1 | 5- | 13 | - 0 | 3- | 0 | - 1 | 2- | 13 | - 1 | 0- | 0 | - 0 | 2- | 2 | - 1 | 15- | 12 | - 6 | 27- | 37 | - |
| No one in Particular | | 0- | 5 | - 0 | 0- | 1 | - 0 | 1- | 3 | - 1 | 3- | 4 | - 2 | 0- | 0 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 0- | 5 | - 1 | 0- | 0 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 1- | 8 | - 1 | 3- | 10 | - |
| | Total | 0- | 11 | - 4 | 7- | 10 | - 3 | 12- | 9 | - 3 | 25- | 16 | - 5 | 4- | 15 | - 1 | 7- | 10 | - 2 | 2- | 9 | - 1 | 5- | 19 | - 1 | 3- | 0 | - 2 | 2- | 13 | - 1 | 0- | 3 | - 0 | 4- | 5 | - 1 | 21- | 45 | -11 | 50- | 73 | -1 |
| MARTA | Adult | 0- | 20 | - 1 | 8- | 32 | - 0 | 0- | 8 | - 4 | 0- | 12 | - 5 | 14- | 11 | - 4 | 8- | 28 | - 4 | 0- | 4 | - 0 | 0- | 1 | - 0 | 0- | 0 | - 1 | 0- | 0 | - 0 | 5- | 11 | - 2 | 3- | 10 | - 1 | 19- | 54 | -12 | 19- | 83 | -1 |
| | Peer | 0- | 1 | - 0 | 3- | 9 | - 1 | 6- | 10 | - 0 | 11- | 7 | - 2 | 3- | 3 | - 3 | 0- | 7 | - 2 | 9- | 16 | - 6 | 17- | 15 | - 6 | 0- | 0 | - 0 | 7- | 3 | - 1 | 2- | 3 | - 1 | 0- | 2 | - 2 | 20- | 33 | -12 | 38- | 43 | -1 |
| No one in Particular | | 0- | 1 | - 0 | 2- | 6 | - 0 | 2- | 1 | - 2 | 2- | 3 | - 2 | 1- | 7 | - 0 | 0- | 2 | - 0 | 0- | 1 | - 0 | 0 | 4 | - 0 | 0- | 0 | - 0 | 1- | 0 | - 1 | 0- | 0 | - 1 | 0- | 0 | - 0 | 3- | 10 | - 1 | 5- | 15 | - |
| | Total | 0- | 22 | - 1 | 13- | 47 | - 1 | 8- | 19 | - 6 | 13- | 22 | - 9 | 18- | 21 | - 7 | 8- | 37 | - 6 | 9- | 21 | - 6 | 17- | 20 | - 8 | 0- | 0 | - 1 | 8- | 3 | - 2 | 7- | 14 | - 4 | 3- | 12 | - 3 | 42- | 97 | -25 | 62-141 | -2 |
| MIGUEL | Adult | 3- | 5 | - 1 | 0- | 6 | - 0 | 12- | 17 | - 8 | 15- | 18 | - 5 | 23- | 8 | - 2 | 9- | 10 | - 0 | 5- | 1 | - 0 | 0- | 2 | - 0 | 0- | 2 | - 2 | 1- | 1 | - 1 | 2- | 7 | - 0 | 1- | 4 | - 0 | 45- | 40 | -13 | 26- | 41 | - |
| | Peer | 0- | 0 | - 0 | 0- | 0 | - 0 | 6- | 2 | - 5 | 14- | 3 | - 0 | 8- | 3 | - 2 | 8- | 0 | - 1 | 8- | 1 | -10 | 10- | 1 | - 3 | 0- | 0 | - 2 | 1- | 0 | - 2 | 4- | 1 | - 0 | 1- | 0 | - 0 | 26- | 7 | -19 | 34- | 4 | - |
| No one in Particular | | 1- | 0 | - 0 | 0- | 0 | - 0 | 1- | 6 | - 0 | 5- | 3 | - 0 | 3- | 1 | - 0 | 1- | 0 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 3- | 1 | - 0 | 0- | 0 | - 0 | 8- | 8 | - 0 | 6- | 3 | - |
| | Total | 4- | 5 | - 1 | 0- | 6 | - 0 | 19- | 25 | -13 | 34- | 24 | - 5 | 34- | 12 | - 4 | 18- | 10 | - 1 | 13- | 2 | -10 | 10- | 3 | - 3 | 0- | 2 | - 4 | 2- | 1 | - 3 | 9- | 9 | - 0 | 2- | 4 | - 0 | 79- | 55 | -32 | 66- | 48 | -1 |
| RAIMUNDO | Adult | 14- | 10 | - 2 | 42- | 11 | - 0 | 0- | 5 | - 1 | 3- | 5 | - 1 | 1- | 34 | - 5 | 7- | 21 | - 1 | 0- | 2 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 2- | 5 | - 1 | 4- | 6 | - 0 | 17- | 56 | - 9 | 56- | 43 | - |
| | Peer | 4- | 0 | - 0 | 5- | 7 | - 3 | 6- | 0 | - 0 | 13- | 4 | - 3 | 5- | 2 | - 1 | 0- | 0 | - 1 | 11- | 1 | - 3 | 9- | 6 | - 2 | 4- | 0 | - 1 | 22- | 2 | - 2 | 2- | 1 | - 1 | 5- | 0 | - 0 | 32- | 4 | - 6 | 54- | 19 | -1 |
| No one in Particular | | 0- | 0 | - 0 | 1- | 0 | - 0 | 0- | 1 | - 2 | 2- | 5 | - 1 | 0- | 3 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 1 | 0- | 0 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 1- | 1 | - 0 | 0- | 0 | - 0 | 1- | 5 | - 3 | 3- | 5 | - |
| | Total | 18- | 10 | - 2 | 18- | 18 | - 3 | 6- | 6 | - 3 | 18- | 14 | - 5 | 6- | 39 | - 6 | 7- | 21 | - 2 | 11- | 3 | - 4 | 9- | 6 | - 2 | 4- | 0 | - 1 | 22- | 2 | - 2 | 5- | 7 | - 2 | 9- | 6 | - 0 | 50- | 65 | -18 | 113- | 67 | -1 |
| CARLOS | Adult | | n/a | | 2- | 10 | - 1 | 7- | 3 | - 3 | 5- | 8 | - 5 | 15- | 16 | - 3 | 1- | 3 | - 1 | 1- | 0 | - 0 | 0- | 1 | - 0 | 3- | 0 | - 0 | 2- | 0 | - 0 | 0- | 4 | - 0 | 6- | 2 | - 0 | 26- | 23 | - 6 | 16- | 24 | - |
| | Peer | | n/a | | 4- | 0 | - 0 | 15- | 2 | - 1 | 51- | 10 | - 9 | 14- | 1 | - 4 | 1- | 3 | - 0 | 9- | 0 | - 4 | 14- | 2 | - 3 | 2- | 0 | - 0 | 7- | 0 | - 3 | 4- | 0 | - 1 | 5- | 2 | - 1 | 44- | 3 | -10 | 82- | 17 | -1 |
| No one in Particular | | | n/a | | 0- | 0 | - 0 | 3- | 0 | - 0 | 10- | 6 | - 0 | 1- | 0 | - 0 | 0- | 0 | - 0 | 1- | 0 | - 0 | 0- | 0 | - 0 | 1- | 0 | - 1 | 2- | 0 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 6- | 0 | - 1 | 12- | 6 | - |
| | Total | | n/a | | 6- | 10 | - 1 | 25- | 5 | - 4 | 66- | 24 | -14 | 30- | 17 | - 7 | 2- | 6 | - 1 | 11- | 0 | - 4 | 14- | 3 | - 3 | 6- | 0 | - 1 | 11- | 0 | - 3 | 4- | 4 | - 1 | 11- | 4 | - 1 | 76- | 26 | - 17 | 110- | 47 | -2 |
| JORGE | Adult | 12- | 5 | - 0 | 24- | 0 | - 1 | 4- | 2 | - 9 | 1- | 3 | - 4 | 0- | 12 | - 0 | 4- | 16 | - 1 | 0- | 2 | - 0 | 1- | 1 | - 0 | 0- | 0 | - 0 | 1- | 0 | - 0 | 5- | 4 | - 1 | 2- | 7 | - 0 | 21- | 25 | -10 | 33- | 27 | - |
| | Peer | 11- | 1 | - 1 | 0- | 0 | - 0 | 9- | 2 | -10 | 2- | 0 | - 3 | 1- | 0 | - 1 | 0- | 0 | - 0 | 10- | 1 | - 6 | 19- | 0 | - 7 | 2- | 1 | - 0 | 6- | 0 | - 2 | 1- | 0 | - 0 | 2- | 1 | - 2 | 24- | 5 | -18 | 29- | 1 | -1 |
| No one in Particular | | 0- | 0 | - 0 | 1- | 0 | - 0 | 0- | 1 | - 0 | 1- | 2 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 1- | 0 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 0- | 0 | - 0 | 0- | 1 | - 1 | 0- | 0 | - 1 | 1- | 2 | - 1 | 2- | 2 | - |
| | Total | 13- | 6 | - 1 | 25- | 0 | - 1 | 13- | 5 | -19 | 4- | 5 | - 7 | 1- | 12 | - 1 | 4- | 16 | - 1 | 11- | 3 | - 6 | 20- | 1 | - 7 | 2- | 1 | - 0 | 7- | 0 | - 2 | 6- | 5 | - 2 | 4- | 8 | - 3 | 46- | 32 | -29 | 64- | 30 | -2 |



BEST COPY AVAILABLE

APPENDIX C continued

SP I CHILDREN IN SPANISH CLASSROOMS

| | | Small Group | | | | | | Seat Work | | | | | | Large Group | | | | | | Recess | | | | | | Lunch | | | | | | Opening/Dismissal | | | | | | TOTAL | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time I | |
| | | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E |
| MARISOL | Adult | 26 | 1 | 3 | 4 | 0 | 0 | 1 | 0 | 2 | 5 | 1 | 3 | 10 | 6 | 0 | 1 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 1 | 2 | 0 | 40 | 7 | 5 | 1: | 11 |
| | Peer | 5 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 1 | 8 | 1 | 3 | 0 | 0 | 0 | 7 | 0 | 2 | 10 | 1 | 1 | 13 | 9 | 6 | 3 | 1 | 0 | 9 | 1 | 2 | 0 | 0 | 0 | 3 | 0 | 2 | 23 | 2 | 2 | 40 | 11 |
| | No one in Particular | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 2 | 2 | 0 | 11 | 3 |
| | Total | 32 | 1 | 3 | 5 | 0 | 0 | 6 | 1 | 3 | 21 | 2 | 6 | 10 | 6 | 0 | 8 | 9 | 2 | 10 | 1 | 1 | 15 | 11 | 6 | 3 | 1 | 0 | 9 | 1 | 2 | 4 | 1 | 0 | 4 | 2 | 3 | 65 | 11 | 7 | 62 | 25 |
| ALICIA | Adult | 16 | 8 | 0 | 3 | 7 | 0 | 1 | 5 | 0 | 4 | 7 | 4 | 0 | 5 | 0 | 1 | 7 | 0 | 0 | 1 | 0 | 4 | 4 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 5 | 8 | 1 | 20 | 26 | 0 | 17 | 33 |
| | Peer | 8 | 3 | 0 | 2 | 0 | 1 | 5 | 2 | 2 | 13 | 2 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 5 | 2 | 0 | 10 | 2 | 1 | 6 | 2 | 1 | 6 | 1 | 0 | 1 | 0 | 2 | 4 | 0 | 1 | 25 | 9 | 6 | 35 | 5 |
| | No one in Particular | 6 | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 1 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 9 | 2 | 1 | 2 | 2 |
| | Total | 30 | 11 | 0 | 5 | 7 | 1 | 9 | 9 | 3 | 19 | 10 | 7 | 0 | 5 | 1 | 1 | 7 | 0 | 5 | 3 | 0 | 14 | 6 | 1 | 9 | 3 | 1 | 6 | 1 | 0 | 1 | 6 | 2 | 9 | 9 | 2 | 54 | 37 | 7 | 54 | 40 |
| ALBERTO | Adult | 8 | 0 | 2 | 4 | 1 | 3 | 4 | 0 | 1 | 9 | 2 | 2 | 5 | 7 | 0 | 11 | 11 | 0 | 0 | 1 | 0 | 1 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 6 | 0 | 3 | 3 | 0 | 19 | 14 | 5 | 28 | 19 |
| | Peer | 1 | 0 | 0 | 4 | 1 | 0 | 7 | 1 | 1 | 11 | 6 | 3 | 2 | 0 | 0 | 3 | 0 | 1 | 10 | 1 | 0 | 7 | 2 | 3 | 3 | 2 | 1 | 8 | 1 | 1 | 2 | 0 | 2 | 2 | 0 | 0 | 25 | 4 | 2 | 35 | 10 |
| | No one in Particular | 1 | 0 | 0 | 0 | 1 | 1 | 3 | 0 | 0 | 2 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 4 | 0 | 0 | 3 | 3 |
| | Total | 10 | 0 | 2 | 8 | 3 | 4 | 14 | 1 | 2 | 22 | 9 | 7 | 7 | 7 | 0 | 14 | 11 | 1 | 10 | 2 | 0 | 9 | 4 | 3 | 4 | 2 | 1 | 8 | 1 | 1 | 3 | 6 | 2 | 5 | 4 | 0 | 48 | 18 | 7 | 66 | 32 |



BEST COPY AVAILABLE

APPENDIX C continued

SP II CHILDREN IN BILINGUAL CLASSROOMS

| | | Small Group | | | | | | Seat Work | | | | | | Large Group | | | | | | Recess | | | | | | Lunch | | | | | | Opening/Dismissal | | | | | | TOTAL | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time | |
| | | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E |
| JANET | Adult | 0 | 12 | 2 | 5 | 16 | 0 | 1 | 12 | 5 | 3 | 10 | 2 | 25 | 12 | 2 | 8 | 26 | 3 | 2 | 6 | 0 | 2 | 8 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 9 | 0 | 5 | 10 | 1 | 29 | 54 | 9 | 23 | 72 |
| | Peer | 0 | 1 | 0 | 2 | 6 | 0 | 5 | 4 | 1 | 1 | 14 | 1 | 1 | 3 | 3 | 1 | 6 | 0 | 5 | 19 | 3 | 15 | 25 | 9 | 0 | 7 | 1 | 1 | 9 | 3 | 0 | 3 | 0 | 0 | 3 | 0 | 11 | 37 | 9 | 20 | 63 |
| | No one in Particular | 0 | 0 | 1 | 2 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 1 | 0 | 3 | 7 | 2 | 4 | 4 |
| | Total | 0 | 13 | 3 | 9 | 23 | 0 | 7 | 17 | 6 | 5 | 25 | 3 | 26 | 21 | 5 | 9 | 32 | 3 | 8 | 26 | 4 | 18 | 34 | 9 | 1 | 7 | 1 | 1 | 11 | 3 | 1 | 14 | 0 | 5 | 14 | 1 | 43 | 98 | 20 | 47 | 139 |
| JAIME | Adult | 15 | 16 | 5 | 22 | 30 | 0 | 1 | 2 | 3 | 3 | 14 | 1 | 4 | 8 | 7 | 2 | 18 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 1 | 0 | 6 | 0 | 0 | 7 | 3 | 0 | 3 | 4 | 0 | 27 | 30 | 15 | 37 | 58 |
| | Peer | 7 | 3 | 0 | 12 | 1 | 3 | 3 | 0 | 6 | 27 | 3 | 1 | 4 | 0 | 0 | 1 | 1 | 1 | 9 | 0 | 3 | 15 | 5 | 1 | 2 | 0 | 1 | 11 | 0 | 2 | 1 | 0 | 2 | 1 | 0 | 0 | 26 | 3 | 13 | 68 | 21 |
| | No one in Particular | 5 | 5 | 1 | 0 | 0 | 1 | 0 | 1 | 2 | 1 | 2 | 1 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 5 | 6 | 6 | 1 | 2 |
| | Total | 27 | 24 | 6 | 34 | 31 | 4 | 4 | 3 | 11 | 31 | 19 | 3 | 8 | 8 | 9 | 3 | 19 | 3 | 9 | 0 | 3 | 16 | 7 | 1 | 2 | 1 | 1 | 17 | 0 | 2 | 8 | 8 | 3 | 4 | 4 | 0 | 58 | 39 | 34 | 106 | 81 |
| BONITA | Adult | 6 | 18 | 3 | NA | NA | NA | 3 | 5 | 0 | 1 | 9 | 1 | 3 | 0 | 0 | 3 | 16 | 0 | 3 | 4 | 0 | 0 | 3 | 0 | 4 | 2 | 1 | 0 | 0 | 2 | 1 | 6 | 0 | 2 | 10 | 3 | 20 | 35 | 4 | 6 | 38 |
| | Peer | 5 | 4 | 2 | | | | 23 | 15 | 3 | 30 | 24 | 2 | 0 | 1 | 0 | 10 | 7 | 1 | 19 | 3 | 4 | 26 | 15 | 1 | 7 | 0 | 0 | 20 | 2 | 1 | 1 | 1 | 0 | 4 | 0 | 1 | 55 | 24 | 9 | 90 | 48 |
| | No one in Particular | 0 | 0 | 0 | | | | 7 | 4 | 0 | 2 | 3 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 2 | 0 | 0 | 1 | 0 | 8 | 7 | 1 | 3 | 10 |
| | Total | 11 | 22 | 5 | | | | 33 | 24 | 3 | 33 | 36 | 4 | 3 | 1 | 0 | 13 | 24 | 1 | 22 | 8 | 5 | 27 | 21 | 1 | 11 | 2 | 1 | 20 | 4 | 3 | 3 | 9 | 0 | 6 | 11 | 4 | 83 | 66 | 14 | 99 | 96 |

SP II CHILDREN IN SPANISH CLASSROOMS

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ERNESTO | Adult | 9 | 0 | 1 | 8 | 3 | 1 | 7 | 1 | 1 | 4 | 4 | 1 | 18 | 11 | 0 | 18 | 6 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 6 | 6 | 0 | 2 | 5 | 1 | 42 | 18 | 2 | 32 | 18 |
| | Peer | 1 | 0 | 0 | 8 | 0 | 2 | 22 | 1 | 3 | 24 | 0 | 1 | 4 | 0 | 1 | 4 | 1 | 6 | 5 | 7 | 2 | 18 | 7 | 0 | 2 | 1 | 0 | 3 | 1 | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 37 | 9 | 6 | 58 | 9 |
| | No one in Particular | 1 | 0 | 0 | 4 | 1 | 0 | 5 | 2 | 0 | 4 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 2 | 0 | 8 | 7 |
| | Total | 11 | 0 | 1 | 20 | 4 | 3 | 34 | 4 | 4 | 32 | 9 | 3 | 22 | 11 | 1 | 11 | 7 | 11 | 5 | 7 | 2 | 18 | 8 | 1 | 4 | 1 | 0 | 3 | 1 | 0 | 9 | 6 | 0 | 3 | 5 | 1 | 85 | 29 | 8 | 98 | 34 |
| JUSTIN | Adult | 13 | 14 | 1 | 10 | 3 | 0 | 1 | 3 | 0 | 2 | 7 | 2 | 0 | 14 | 0 | 0 | 8 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 8 | 0 | 1 | 5 | 0 | 15 | 40 | 1 | 13 | 23 |
| | Peer | 3 | 0 | 0 | 4 | 2 | 0 | 15 | 2 | 0 | 17 | 10 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 5 | 2 | 16 | 8 | 5 | 2 | 4 | 1 | 4 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 11 | 3 | 41 | 25 |
| | No one in Particular | 1 | 0 | 0 | 2 | 0 | 0 | 5 | 0 | 1 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 5 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 7 | 1 | 1 | 9 | 9 |
| | Total | 17 | 14 | 1 | 16 | 5 | 0 | 21 | 5 | 1 | 23 | 18 | 6 | 0 | 14 | 0 | 0 | 9 | 0 | 3 | 6 | 2 | 18 | 13 | 5 | 2 | 5 | 1 | 4 | 7 | 1 | 2 | 8 | 0 | 2 | 5 | 0 | 45 | 52 | 5 | 63 | 57 |





BEST COPY AVAILABLE

APPENDIX I continued

SPEECH CHILDREN IN ENGLISH CLASSROOMS

| | | Small Group | | | | | | Seat Work | | | | | | Large Group | | | | | | Recess | | | | | | Lunch | | | | | | Quieting/Disatisfaction | | | | | | Total | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | |
| | | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV |
| [illegible] | Adult | 1 | 21 | 1 | 0 | 23 | 0 | 6 | 21 | 4 | 0 | 9 | 1 | 0 | 8 | 0 | 0 | 14 | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 5 | 0 | 0 | 10 | 0 | 7 | 59 | 5 | 1 | 57 | 3 |
| | Peer | 0 | 2 | 0 | 0 | 6 | 0 | 0 | 14 | 0 | 0 | 20 | 4 | 0 | 1 | 0 | 0 | 4 | 1 | 0 | 9 | 1 | 1 | 10 | 1 | 1 | 7 | 1 | 0 | 10 | 3 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 33 | 2 | 0 | 51 | 10 |
| No one in Particular | | 0 | 1 | 0 | 0 | 2 | 1 | 0 | 5 | 0 | 0 | 4 | 2 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 7 | 0 | 0 | 9 | 5 |
| | Total | 1 | 24 | 1 | 0 | 31 | 1 | 6 | 40 | 4 | 0 | 33 | 7 | 0 | 10 | 0 | 0 | 19 | 1 | 0 | 12 | 1 | 1 | 11 | 1 | 0 | 8 | 1 | 1 | 10 | 3 | 0 | 5 | 0 | 0 | 13 | 1 | 7 | 99 | 7 | 1 | 117 | 18 |
| FRANKLIN | Adult | 0 | 20 | 4 | 0 | 12 | 2 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 12 | 1 | 0 | 12 | 0 | 0 | 4 | 0 | 0 | 6 | 0 | 0 | 4 | 0 | 0 | 2 | 0 | 0 | 6 | 1 | 0 | 3 | 1 | 0 | 46 | 6 | 0 | 38 | 4 |
| | Peer | 0 | 3 | 0 | 0 | 7 | 1 | 0 | 23 | 1 | 0 | 41 | 0 | 0 | 3 | 0 | 0 | 11 | 1 | 0 | 7 | 0 | 0 | 3 | 0 | 0 | 8 | 1 | 0 | 15 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 49 | 4 | 0 | 77 | 2 |
| No one in Particular | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 4 | 0 |
| | Total | 0 | 23 | 4 | 0 | 19 | 3 | 0 | 24 | 1 | 0 | 47 | 1 | 0 | 15 | 1 | 0 | 24 | 1 | 0 | 11 | 0 | 0 | 9 | 0 | 0 | 12 | 1 | 0 | 17 | 0 | 0 | 12 | 2 | 0 | 3 | 1 | 0 | 97 | 11 | 0 | 119 | 6 |
| [illegible] | Adult | 8 | 27 | 2 | 0 | 6 | 0 | 0 | 11 | 3 | 0 | 12 | 0 | 0 | 11 | 1 | 0 | 23 | 2 | 0 | 2 | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 9 | 0 | 0 | 4 | 1 | 0 | 6 | 0 | 8 | 56 | 7 | 0 | 59 | 2 |
| | Peer | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 20 | 0 | 0 | 42 | 1 | 0 | 2 | 0 | 0 | 11 | 1 | 0 | 3 | 0 | 0 | 3 | 2 | 0 | 10 | 0 | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 38 | 1 | 0 | 66 | 5 |
| No one in Particular | | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 8 | 2 | 1 | 4 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 1 | 1 | 6 | 3 |
| | Total | 8 | 31 | 2 | 0 | 7 | 0 | 0 | 19 | 5 | 1 | 58 | 2 | 0 | 14 | 1 | 0 | 15 | 1 | 0 | 7 | 0 | 0 | 7 | 2 | 0 | 11 | 0 | 0 | 13 | 1 | 0 | 4 | 2 | 0 | 11 | 0 | 8 | 107 | 9 | 1 | 131 | 10 |
| DUKE | Adult | 0 | 24 | 5 | 0 | 26 | 3 | 0 | 11 | 1 | 0 | 8 | 0 | 0 | 12 | 0 | 0 | 13 | 1 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 5 | 0 | 0 | 5 | 1 | 0 | 61 | 8 | 0 | 54 | 9 |
| | Peer | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 38 | 1 | 0 | 13 | 1 | 0 | 0 | 1 | 0 | 16 | 0 | 0 | 4 | 0 | 0 | 2 | 0 | 0 | 4 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 47 | 2 | 0 | 46 | 1 |
| No one in Particular | | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 9 | 2 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 12 | 3 | 0 | 6 | 3 |
| | Total | 0 | 31 | 6 | 0 | 29 | 3 | 0 | 58 | 6 | 0 | 24 | 2 | 0 | 12 | 1 | 0 | 31 | 1 | 0 | 6 | 0 | 0 | 4 | 0 | 0 | 6 | 0 | 0 | 13 | 1 | 0 | 6 | 0 | 0 | 5 | 3 | 0 | 120 | 13 | 0 | 106 | 13 |
| JUANITA | Adult | 0 | 3 | 0 | 0 | 18 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 10 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 14 | 0 | 0 | 36 | 1 |
| | Peer | 0 | [illegible] | 0 | 0 | 2 | 0 | 1 | 11 | 0 | 0 | 27 | 1 | 0 | 4 | 0 | 1 | 3 | 1 | 0 | 0 | 1 | 0 | 6 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 21 | 2 | 1 | 40 | 3 |
| No one in Particular | | 0 | 2 | 0 | 0 | 3 | 2 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 4 | 2 |
| | Total | 0 | 8 | 0 | 0 | 23 | 2 | 1 | 12 | 0 | 0 | 28 | 1 | 0 | 9 | 0 | 1 | 13 | 1 | 0 | 4 | 1 | 0 | 10 | 0 | 0 | 4 | 1 | 0 | 2 | 1 | 0 | 1 | 0 | 0 | 4 | 0 | 1 | 38 | 2 | 1 | 80 | 6 |
| JIMMY | Adult | 1 | 46 | 6 | 4 | 14 | 3 | 2 | 7 | 0 | 2 | 16 | 0 | 0 | 10 | 0 | 4 | 44 | 1 | 0 | 2 | 0 | 0 | 5 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 8 | 0 | 4 | 73 | 6 | 10 | 85 | 6 |
| | Peer | 0 | 1 | 0 | 0 | 2 | 1 | 0 | 5 | 0 | 1 | 14 | 0 | 0 | 4 | 2 | 0 | 11 | 1 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 6 | 2 | 2 | 7 | 1 | 0 | 0 | 0 | 1 | 6 | 0 | 0 | 16 | 2 | 6 | 41 | 3 |
| No one in Particular | | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 0 | 0 | 6 | 1 | 1 | 8 | 0 |
| | Total | 1 | 50 | 6 | 4 | 17 | 4 | 2 | 13 | 0 | 2 | 32 | 0 | 0 | 14 | 2 | 4 | 58 | 4 | 0 | 2 | 0 | 2 | 6 | 0 | 1 | 7 | 3 | 2 | 7 | 1 | 0 | 9 | 0 | 2 | 14 | 0 | 4 | 95 | 9 | 17 | 134 | 9 |
| ALBERTO | Adult | 1 | 6 | 1 | 0 | 9 | 1 | 0 | 5 | 0 | 0 | 5 | 1 | 2 | 9 | 2 | 0 | 20 | 8 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 7 | 0 | 0 | 4 | 0 | 0 | 6 | 0 | 3 | 25 | 3 | 0 | 45 | 12 |
| | Peer | 1 | 3 | 0 | 0 | 3 | 0 | 0 | 16 | 1 | 0 | 21 | 1 | 0 | 3 | 0 | 1 | 11 | 2 | 0 | 5 | 4 | 0 | 18 | 0 | 0 | 7 | 1 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 6 | 1 | 1 | 34 | 6 | 1 | 72 | 9 |
| No one in Particular | | 0 | 4 | 0 | 0 | 3 | 0 | 0 | 6 | 0 | 0 | 5 | 0 | 0 | 1 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 13 | 0 | 0 | 20 | 0 |
| | Total | 2 | 13 | 1 | 0 | 15 | 1 | 0 | 27 | 1 | 0 | 31 | 2 | 2 | 13 | 2 | 1 | 37 | 10 | 0 | 5 | 4 | 0 | 23 | 0 | 0 | 10 | 1 | 0 | 18 | 0 | 0 | 4 | 0 | 0 | 13 | 1 | 4 | 72 | 9 | 1 | 137 | 21 |
| CHRISPIN | Adult | 0 | 29 | 0 | 0 | 25 | 0 | 0 | 5 | 0 | 0 | 9 | 2 | 0 | 21 | 0 | 0 | 16 | 0 | 0 | 1 | 0 | 0 | 8 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 9 | 0 | 0 | 4 | 0 | 1 | 66 | 0 | 0 | 62 | 2 |
| | Peer | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 10 | 1 | 0 | 13 | 1 | 0 | 1 | 0 | 0 | 4 | 0 | 0 | 14 | 2 | 1 | 24 | 1 | 2 | 6 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 32 | 3 | 1 | 49 | 4 |
| No one in Particular | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 2 | 0 | 2 | 0 |
| | Total | 0 | 30 | 0 | 0 | 25 | 0 | 0 | 17 | 3 | 0 | 22 | 3 | 0 | 22 | 0 | 0 | 20 | 0 | 0 | 17 | 2 | 1 | 34 | 1 | 2 | 7 | 0 | 0 | 7 | 0 | 1 | 9 | 0 | 0 | 5 | 0 | 3 | 102 | 5 | 1 | 113 | 6 |
| LEA | Adult | 0 | 26 | 0 | 0 | 10 | 0 | 0 | 3 | 5 | 0 | 4 | 2 | 0 | 8 | 0 | 0 | 19 | 3 | 1 | 2 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 7 | 1 | 0 | 6 | 0 | 1 | 46 | 7 | 0 | 43 | 5 |
| | Peer | 0 | 3 | 0 | 0 | 2 | 0 | 1 | 20 | 0 | 4 | 24 | 2 | 0 | 0 | 0 | 0 | 4 | 1 | 0 | 3 | 4 | 4 | 9 | 2 | 0 | 4 | 2 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 1 | 31 | 5 | 6 | 53 | 6 |
| No one in Particular | | 0 | 4 | 0 | 0 | 1 | 1 | 1 | 6 | 1 | 0 | 6 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 10 | 1 | 0 | 11 | 3 |
| | Total | 0 | 33 | 1 | 0 | 13 | 1 | 2 | 29 | 6 | 4 | 34 | 7 | 0 | 8 | 0 | 0 | 23 | 4 | 1 | 5 | 4 | 4 | 13 | 2 | 0 | 4 | 2 | 0 | 13 | 0 | 0 | 7 | 1 | 0 | 11 | 0 | 3 | 87 | 13 | 6 | 107 | 4 |
| MADELEN | Adult | 0 | 17 | 1 | 0 | 20 | 1 | 0 | 9 | 0 | 0 | 5 | 2 | 3 | 19 | 1 | 0 | 34 | 1 | 1 | 8 | 0 | 1 | 2 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 12 | 4 | 0 | 18 | 2 | 13 | 72 | 5 | 1 | 79 | 8 |
| | Peer | 0 | 0 | 0 | 0 | 2 | 0 | 8 | 3 | 4 | 11 | 10 | 5 | 1 | 3 | 0 | 2 | 2 | 0 | 12 | 6 | 6 | 8 | 18 | 2 | 1 | 1 | 0 | 5 | 2 | 0 | 1 | 5 | 0 | 1 | 3 | 1 | 23 | 20 | 10 | 27 | 37 | 12 |
| No one in Particular | | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 5 | 3 | 1 | 5 | 1 | 0 | 3 | 2 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 15 | 7 | 1 | 11 | 2 |
| | Total | 0 | 19 | 0 | 0 | 22 | 0 | 8 | 17 | 7 | 12 | 20 | 8 | 4 | 45 | 3 | 2 | 37 | 1 | 13 | 15 | 7 | 9 | 25 | 2 | 2 | 4 | 0 | 5 | 2 | 6 | 4 | 21 | 5 | 1 | 21 | 3 | 36 | 107 | 22 | 29 | 127 | 20 |
| ADRIANA | Adult | NA | NA | NA | 1 | 14 | 1 | 3 | 21 | 1 | 0 | 12 | 4 | 1 | 43 | 1 | 0 | 0 | 0 | 0 | 9 | 1 | 0 | 2 | 0 | NA | NA | NA | 2 | 2 | 0 | 1 | 21 | 1 | 0 | 12 | 2 | 5 | 94 | 4 | 5 | 83 | 4 |
| | Peer | | | | 0 | 0 | 0 | 3 | 4 | 0 | 4 | 5 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 7 | 2 | 7 | 7 | 20 | 3 | | | | 7 | 6 | 1 | 0 | 0 | 0 | 4 | 1 | 0 | 11 | 7 | 7 | 28 | 19 | 8 |
| No one in Particular | | | | | 0 | 3 | 0 | 1 | 5 | 0 | 0 | 5 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 1 | 0 | | | | 0 | 7 | 0 | 0 | 2 | 0 | 1 | 9 | 0 | 1 | 14 | 0 | 3 | 14 | 0 |
| | Total | | | | 1 | 17 | 1 | 7 | 30 | 1 | 4 | 22 | 4 | 2 | 46 | 1 | 0 | 0 | 0 | 7 | 16 | 8 | 7 | 23 | 3 | | | | 9 | 10 | 1 | 1 | 23 | 1 | 5 | 14 | 2 | 17 | 115 | 11 | 36 | 130 | 18 |



BEST COPY AVAILABLE

APPENDIX C continued

EP CHILDREN IN ENGLISH CLASSROOMS

| | | Small Group | | | | | | Seat Work | | | | | | Large Group | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | |
| | | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV |
| GREGORIO | Adult | 0 | 15 | 0 | 0 | 26 | 1 | 0 | 5 | 6 | 0 | 5 | 7 | 0 | 10 | 1 | 0 | 12 | 0 |
| | Peer | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 9 | 3 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 5 | 0 |
| | No one in Particular | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 2 | 6 | 0 | 4 | 2 | 0 | 0 | 1 | 0 | 0 | 0 |
| | Total | 0 | 16 | 0 | 0 | 30 | 2 | 0 | 16 | 15 | 0 | 26 | 9 | 0 | 10 | 2 | 0 | 17 | 0 |
| MIKE | Adult | 0 | 16 | 1 | 0 | 18 | 0 | 0 | 10 | 2 | 0 | 11 | 4 | 0 | 15 | 1 | 0 | 16 | 0 |
| | Peer | 0 | 5 | 0 | 0 | 6 | 0 | 0 | 15 | 1 | 0 | 30 | 5 | 0 | 3 | 1 | 0 | 1 | 0 |
| | No one in Particular | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 5 | 1 | 0 | 3 | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| | Total | 0 | 21 | 1 | 0 | 26 | 1 | 0 | 30 | 4 | 0 | 44 | 9 | 0 | 20 | 2 | 0 | 17 | 2 |
| RUTH | Adult | 0 | 14 | 2 | 0 | 17 | 1 | 1 | 22 | 3 | 0 | 11 | 0 | 0 | 3 | 1 | 0 | 9 | 1 |
| | Peer | 0 | 3 | 0 | 0 | 5 | 0 | 0 | 27 | 7 | 0 | 15 | 0 | 0 | 1 | 2 | 0 | 8 | 3 |
| | No one in Particular | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Total | 0 | 17 | 2 | 0 | 22 | 1 | 1 | 50 | 10 | 0 | 28 | 0 | 0 | 4 | 3 | 0 | 17 | 4 |
| ISMAEL | Adult | 0 | 18 | 1 | 0 | 10 | 0 | 0 | 10 | 0 | 0 | 13 | 2 | 0 | 24 | 0 | 0 | 3 | 1 |
| | Peer | 0 | 7 | 2 | 0 | 2 | 1 | 0 | 20 | 1 | 0 | 7 | 0 | 0 | 1 | 1 | 1 | 24 | 2 |
| | No one in Particular | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 0 |
| | Total | 0 | 26 | 3 | 0 | 13 | 1 | 0 | 32 | 1 | 0 | 22 | 3 | 0 | 25 | 1 | 1 | 28 | 3 |
| SUSAN | Adult | 0 | 11 | 3 | 0 | 6 | 2 | 0 | 3 | 1 | 0 | 7 | 1 | 0 | 17 | 1 | 1 | 13 | 2 |
| | Peer | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 11 | 0 | 0 | 20 | 2 | 0 | 2 | 0 | 0 | 6 | 3 |
| | No one in Particular | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 8 | 0 | 0 | 7 | 4 | 0 | 1 | 0 | 0 | 2 | 0 |
| | Total | 0 | 14 | 4 | 0 | 7 | 3 | 0 | 22 | 1 | 0 | 34 | 7 | 0 | 20 | 1 | 1 | 21 | 5 |
| CARMEN | Adult | 0 | 5 | 1 | 0 | 13 | 0 | 0 | 3 | 0 | 0 | 7 | 4 | 0 | 16 | 0 | 0 | 14 | 1 |
| | Peer | 0 | 2 | 1 | 0 | 3 | 0 | 0 | 25 | 2 | 1 | 34 | 2 | 0 | 3 | 0 | 0 | 6 | 0 |
| | No one in Particular | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 9 | 1 | 0 | 1 | 0 | 0 | 0 | 0 |
| | Total | 0 | 7 | 2 | 0 | 16 | 0 | 0 | 29 | 2 | 1 | 50 | 7 | 0 | 20 | 0 | 0 | 20 | 1 |
| JUDY | Adult | 0 | 7 | 3 | 0 | 5 | 2 | 0 | 5 | 0 | 0 | 2 | 5 | 0 | 22 | 1 | 0 | 15 | 4 |
| | Peer | 0 | 3 | 0 | 0 | 0 | 0 | 1 | 6 | 2 | 0 | 10 | 0 | 0 | 1 | 0 | 0 | 2 | 1 |
| | No one in Particular | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Total | 0 | 10 | 3 | 0 | 5 | 2 | 1 | 11 | 3 | 0 | 13 | 6 | 0 | 23 | 1 | 0 | 17 | 5 |

| | | Recess | | | | | | Lunch | | | | | | Opening/Dismissal | | | | | | TOTAL | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | |
| | | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV | S | E | NV |
| GREGORIO | Adult | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 10 | 0 | 0 | 34 | 8 | 0 | 53 | 8 |
| | Peer | 0 | 2 | 0 | 0 | 3 | 0 | 0 | 5 | 1 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 16 | 4 | 0 | 38 | 0 |
| | No one in Particular | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 3 | 7 | 0 | 7 | 3 |
| | Total | 0 | 3 | 0 | 0 | 5 | 0 | 0 | 5 | 1 | 0 | 6 | 0 | 0 | 3 | 1 | 0 | 16 | 0 | 0 | 53 | 19 | 0 | 98 | 11 |
| MIKE | Adult | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 0 | 3 | 0 | 0 | 7 | 1 | 0 | 44 | 5 | 0 | 56 | 8 |
| | Peer | 0 | 9 | 1 | 0 | 11 | 0 | 0 | 3 | 1 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 4 | 1 | 0 | 35 | 4 | 0 | 57 | 6 |
| | No one in Particular | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 1 | 0 | 7 | 3 |
| | Total | 0 | 9 | 1 | 0 | 15 | 0 | 0 | 3 | 2 | 0 | 7 | 3 | 0 | 3 | 0 | 0 | 11 | 2 | 0 | 86 | 10 | 0 | 120 | 17 |
| RUTH | Adult | 0 | 3 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 6 | 3 | 1 | 54 | 6 | 0 | 45 | 7 |
| | Peer | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 2 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 47 | 10 | 0 | 37 | 5 |
| | No one in Particular | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 7 | 0 |
| | Total | 0 | 7 | 0 | 0 | 6 | 2 | 0 | 2 | 0 | 0 | 3 | 0 | 0 | 12 | 1 | 0 | 8 | 3 | 1 | 102 | 16 | 0 | 84 | 17 |
| ISMAEL | Adult | 0 | 5 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 10 | 0 | 0 | 13 | 1 | 0 | 67 | 1 | 0 | 45 | 4 |
| | Peer | 0 | 4 | 0 | 0 | 1 | 0 | 0 | 8 | 1 | 0 | 2 | 1 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 42 | 5 | 1 | 38 | 7 |
| | No one in Particular | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 5 | 1 |
| | Total | 0 | 10 | 0 | 0 | 4 | 0 | 0 | 8 | 1 | 0 | 6 | 1 | 0 | 12 | 0 | 0 | 15 | 1 | 0 | 113 | 6 | 1 | 88 | 12 |
| SUSAN | Adult | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 7 | 0 | 0 | 41 | 5 | 1 | 35 | 5 |
| | Peer | 0 | 8 | 0 | 0 | 13 | 5 | 1 | 4 | 0 | 0 | 13 | 1 | 0 | 4 | 0 | 0 | 0 | 0 | 1 | 29 | 2 | 0 | 52 | 12 |
| | No one in Particular | 0 | 1 | 0 | 0 | 4 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 15 | 0 | 0 | 15 | 4 |
| | Total | 0 | 9 | 0 | 0 | 19 | 5 | 1 | 8 | 0 | 0 | 13 | 1 | 0 | 12 | 0 | 0 | 8 | 0 | 1 | 85 | 7 | 1 | 102 | 21 |
| CARMEN | Adult | 1 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 8 | 0 | 0 | 6 | 0 | 2 | 33 | 6 | 0 | 42 | 5 |
| | Peer | 0 | 11 | 2 | 0 | 22 | 6 | 0 | 2 | 0 | 0 | 17 | 0 | 0 | 5 | 1 | 0 | 5 | 2 | 0 | 48 | 6 | 1 | 96 | 10 |
| | No one in Particular | 0 | 5 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 1 | 0 | 10 | 1 |
| | Total | 1 | 17 | 3 | 0 | 26 | 8 | 0 | 2 | 0 | 0 | 17 | 0 | 1 | 13 | 1 | 0 | 11 | 2 | 2 | 88 | 13 | 1 | 148 | 16 |
| JUDY | Adult | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 0 | 0 | 6 | 1 | 1 | 40 | 4 | 0 | 30 | 12 |
| | Peer | 1 | 8 | 0 | 0 | 15 | 1 | 0 | 8 | 1 | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 26 | 3 | 0 | 31 | 3 |
| | No one in Particular | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 |
| | Total | 1 | 10 | 0 | 0 | 17 | 1 | 0 | 8 | 1 | 0 | 4 | 1 | 1 | 5 | 0 | 0 | 6 | 1 | 3 | 67 | 8 | 0 | 62 | 16 |

EP CHILDREN IN BILINGUAL CLASSROOMS

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ENRIQUE | Adult | 18 | 25 | 1 | 19 | 23 | 0 | 0 | 5 | 3 | 7 | 23 | 0 | 0 | 12 | 0 | 2 | 10 | 0 | 0 | 1 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 10 | 0 | 1 | 10 | 0 |
| | Peer | 0 | 8 | 0 | 2 | 6 | 3 | 7 | 12 | 2 | 11 | 16 | 1 | 1 | 5 | 1 | 0 | 0 | 0 | 6 | 13 | 2 | 6 | 20 | 0 | 0 | 2 | 1 | 3 | 4 | 1 | 3 | 5 | 0 | 1 | 4 | 0 |
| | No one in Particular | 0 | 5 | 0 | 3 | 4 | 2 | 0 | 15 | 1 | 1 | 21 | 0 | 0 | 3 | 1 | 0 | 2 | 0 | 0 | 6 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 3 | 1 | 0 | 2 | 0 |
| | Total | 18 | 38 | 1 | 24 | 33 | 5 | 7 | 32 | 6 | 14 | 60 | 1 | 1 | 20 | 2 | 2 | 12 | 0 | 6 | 20 | 2 | 7 | 25 | 0 | 0 | 3 | 1 | 3 | 7 | 1 | 3 | 18 | 1 | 2 | 16 | 0 |

| | | TOTAL | | | | | |
|---|---|---|---|---|---|---|---|
| | | Time I | | | Time II | | |
| | | S | E | NV | S | E | NV |
| ENRIQUE | Adult | 18 | 53 | 4 | 24 | 71 | 0 |
| | Peer | 12 | 45 | 6 | 23 | 50 | 5 |
| | No one in Particular | 0 | 33 | 3 | 5 | 31 | 2 |
| | Total | 30 | 131 | 13 | 52 | 152 | 7 |



BEST COPY AVAILABLE

# APPENDIX D

## ABSOLUTE FREQUENCIES OF STRATEGIES EMPLOYED BY INDIVIDUAL CHILDREN DURING THE FIRST GRADE YEAR

APPENDIX B

ABSOLUTE FREQUENCIES OF STRATEGIES EMPLOYED
BY INDIVIDUAL CHILDREN DURING THE FIRST GRADE YEAR

SP I CHILDREN IN ENGLISH CLASSROOMS

| | RAMONA | | | | | | JULIO | | | | | | VICKY | | | | | | RAMON | | | | | | CANDIDO | | | | | | IVETTE | | | | | | ESTEBAN | | | | | | DOMINGA | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Time I | | | | Time II | | Time I | | | | Time II | | Time I | | | | Time II | | Time I | | | | Time II | | Time I | | | | Time II | | Time I | | | | Time II | | Time I | | | | Time II | | Time I | | | | Time II | |
| | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS |
| VERBAL STRATEGIES | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Language Switch | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Literal Translation | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 2 | 0 |
| Message Abandonment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Formulaic Expression | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 10 | 0 | 0 | 6 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 16 | 0 | 0 | 13 | 0 | 1 | 14 | 0 | 0 | 12 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 9 | 0 |
| Repetition | 1 | 25 | 0 | 2 | 7 | 0 | 0 | 18 | 0 | 0 | 10 | 0 | 0 | 5 | 0 | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 2 | 20 | 0 | 0 | 10 | 0 | 0 | 13 | 1 | 3 | 20 | 3 | 1 | 13 | 0 | 3 | 22 | 0 | 0 | 20 | 0 | 0 | 12 | 0 |
| Appeal for Assistance | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 |
| Memorization | 0 | 4 | 0 | 0 | 6 | 0 | 0 | 2 | 0 | 0 | 7 | 0 | 0 | 7 | 0 | 0 | 2 | 0 | 1 | 8 | 2 | 0 | 2 | 0 | 0 | 7 | 0 | 1 | 6 | 0 | 2 | 16 | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 11 | 0 | 0 | 8 | 0 |
| Monitoring | 0 | 2 | 0 | 0 | 3 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 3 | 0 |
| Circumlocution | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pidginization | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Talks to Self | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 8 | 0 | 2 | 3 | 0 | 0 | 1 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 4 | 0 |
| One word Answer | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| Elaboration | 0 | 5 | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 5 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 1 | 0 | 1 | 8 | 0 | 0 | 8 | 0 | 0 | 8 | 1 | 0 | 4 | 0 | 0 | 4 | 0 | 4 | 5 | 0 | 0 | 6 | 1 | 0 | 7 | 0 |
| Clarification Request | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 4 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 1 | 0 |
| Onomatopoeia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Story Telling | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Role Plays | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 6 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 4 | 5 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| Changes Topic | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 |
| Attention Getter | 1 | 6 | 0 | 0 | 1 | 0 | 0 | 13 | 0 | 0 | 23 | 0 | 0 | 6 | 0 | 0 | 9 | 0 | 2 | 10 | 5 | 0 | 12 | 0 | 0 | 10 | 0 | 0 | 3 | 0 | 2 | 23 | 0 | 8 | 17 | 1 | 5 | 2 | 0 | 3 | 6 | 0 | 2 | 9 | 0 | 7 | 14 | 0 |
| Answers in Unison | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 5 | 0 | 0 | 2 | 0 | 0 | 7 | 0 | 0 | 14 | 0 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 4 | 0 | 1 | 11 | 0 | 0 | 12 | 0 | 0 | 11 | 0 | 0 | 6 | 0 | 0 | 15 | 0 | 3 | 6 | 0 |
| Anticipatory Answer | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 | 0 |
| Reads Aloud to Self | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| Corrects/Teaches | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 5 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 4 | 0 | 2 | 13 | 0 | 0 | 3 | 0 | 0 | 6 | 1 | 0 | 6 | 3 | 0 | 2 | 2 | 1 | 4 | 0 | 1 | 1 | 0 | 4 | 11 | 0 |
| Selective Memory | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Word Play | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| NONVERBAL STRATEGIES | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Avoidance | 14 | | | 10 | | | 7 | | | 14 | | | 10 | | | 7 | | | 12 | | | 4 | | | 10 | | | 16 | | | 9 | | | 24 | | | 13 | | | 26 | | | 17 | | | 15 | | |
| Listening | 0 | | | 0 | | | 0 | | | 0 | | | 1 | | | 1 | | | 0 | | | 0 | | | 1 | | | 4 | | | 0 | | | 1 | | | 1 | | | 1 | | | 0 | | | 0 | | |
| Imitation | 0 | | | 0 | | | 0 | | | 1 | | | 4 | | | 0 | | | 0 | | | 0 | | | 2 | | | 3 | | | 6 | | | 4 | | | 1 | | | 5 | | | 1 | | | 3 | | |
| Mime | 0 | | | 0 | | | 2 | | | 0 | | | 2 | | | 0 | | | 0 | | | 2 | | | 5 | | | 0 | | | 3 | | | 4 | | | 1 | | | 1 | | | 2 | | | 0 | | |
| Identification | 0 | | | 1 | | | 2 | | | 2 | | | 2 | | | 6 | | | 1 | | | 0 | | | 1 | | | 4 | | | 12 | | | 9 | | | 1 | | | 0 | | | 0 | | | 1 | | |
| Demonstration | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | |
| Attention Getter | 13 | | | 2 | | | 7 | | | 4 | | | 7 | | | 15 | | | 6 | | | 5 | | | 15 | | | 12 | | | 4 | | | 5 | | | 10 | | | 10 | | | 12 | | | 11 | | |
| Prefabricated Behavior | 0 | | | 1 | | | 1 | | | 1 | | | 1 | | | 1 | | | 0 | | | 0 | | | 0 | | | 0 | | | 1 | | | 1 | | | 0 | | | 4 | | | 3 | | | 2 | | |
| Writing | 2 | | | 1 | | | 3 | | | 0 | | | 1 | | | 3 | | | 6 | | | 0 | | | 0 | | | 7 | | | 2 | | | 4 | | | 4 | | | 7 | | | 2 | | | 0 | | |
| Checking/Copying Work | 0 | | | 0 | | | 2 | | | 0 | | | 3 | | | 0 | | | 2 | | | 0 | | | 2 | | | 0 | | | 1 | | | 2 | | | 1 | | | 0 | | | 0 | | | 1 | | |
| Self-corrects | 2 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 1 | | | 0 | | | 1 | | | 2 | | | 2 | | | 4 | | | 2 | | |
| Mouths | 0 | | | 2 | | | 0 | | | 0 | | | 3 | | | 0 | | | 1 | | | 2 | | | 1 | | | 2 | | | 3 | | | 0 | | | 1 | | | 3 | | | 4 | | | 2 | | |
| Corrects/ Teaches | 0 | | | 0 | | | 2 | | | 0 | | | 0 | | | 0 | | | 1 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | |
| Anticipatory Answer | 0 | | | 0 | | | 0 | | | 3 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 1 | | | 0 | | | 3 | | | 1 | | | 0 | | | 0 | | | 1 | | |

BEST COPY AVAILABLE

APPENDIX D continued

SP I CHILDREN IN BILINGUAL CLASSROOMS

| | BARBARA | | | | | | REYNALDO | | | | | | MARTA | | | | | | MIGUEL | | | | | | RAIMUNDO | | | | | | CARLOS | | | | | | JORGE | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | |
| | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS |
| VERBAL STRATEGIES | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Language Switch | 0- | 0 - | 2 | 0- | 0 - | 1 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 2 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 1 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Literal Translation | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 2 - | 0 | 0- | 0 - | 0 | 0- | 2 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Message Abandonment | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 3 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 2- | 0 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 |
| Formulaic Expression | 2- | 11 - | 1 | 0- | 11 - | 0 | 0- | 6 - | 0 | 0- | 28 - | 0 | 0- | 15 - | 0 | 1- | 2 - | 0 | 1- | 5 - | 0 | 0- | 2 - | 0 | 2- | 8 - | 0 | 1- | 4 - | 0 | 0- | 4 - | 0 | 0- | 3 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 |
| Repetition | 11- | 12 - | 5 | 3- | 21 - | 0 | 1- | 6 - | 0 | 2- | 13 - | 0 | 9- | 27 - | 0 | 7- | 32 - | 0 | 11- | 10 - | 2 | 3- | 17 - | 2 | 7- | 15 - | 0 | 8- | 24 - | 0 | 0- | 6 - | 0 | 0- | 18 - | 1 | 7- | 4 - | 0 | 13- | 7 - | 1 |
| Appeal for Assistance | 0- | 0 - | 0 | 0- | 0 - | 0 | 2- | 1 - | 0 | 3- | 2 - | 0 | 0- | 0 - | 0 | 0- | 3 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 1- | 0 - | 0 |
| Memorization | 1- | 8 - | 0 | 1- | 7 - | 0 | 0- | 11 - | 0 | 1- | 6 - | 1 | 3- | 18 - | 0 | 5- | 17 - | 0 | 2- | 6 - | 0 | 1- | 4 - | 0 | 3- | 4 - | 0 | 2- | 4 - | 0 | 2- | 0 - | 0 | 1- | 3 - | 0 | 1- | 2 - | 0 | 3- | 5 - | 0 |
| Monitoring | 0- | 2 - | 0 | 0- | 6 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 1 - | 0 | 0- | 2 - | 0 | 1- | 1 - | 0 | 0- | 0 - | 0 | 2- | 1 - | 0 | 3- | 1 - | 0 | 1- | 0 - | 0 | 1- | 0 - | 0 | 0- | 0 - | 0 | 1- | 1 - | 0 |
| Circumlocution | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 1- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Pidginization | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 1- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Talks to Self | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 7- | 3 - | 0 | 4- | 3 - | 0 | 5- | 3 - | 0 | 1- | 0 - | 0 | 1- | 2 - | 0 | 2- | 3 - | 0 | 2- | 5 - | 0 | 0- | 0 - | 0 | 2- | 2 - | 1 | 0- | 0 - | 0 | 2- | 3 - | 0 |
| One Word Answer | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 2- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 4 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Elaboration | 8- | 0 - | 3 | 0- | 1 - | 0 | 0- | 0 - | 0 | 4- | 2 - | 0 | 0- | 8 - | 0 | 0- | 9 - | 0 | 9- | 1 - | 0 | 1- | 0 - | 0 | 8- | 15 - | 0 | 9- | 2 - | 3 | 3- | 0 - | 0 | 4- | 0 - | 1 | 0- | 0 - | 0 | 2- | 0 - | 0 |
| Clarification Request | 3- | 0 - | 0 | 0- | 1 - | 0 | 0- | 1 - | 0 | 2- | 1 - | 0 | 0- | 0 - | 0 | 1- | 7 - | 0 | 1- | 0 - | 0 | 1- | 0 - | 0 | 0- | 0 - | 0 | 4- | 1 - | 1 | 0- | 0 - | 0 | 6- | 1 - | 0 | 0- | 0 - | 0 | 1- | 0 - | 0 |
| Onomatopoeia | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 3 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 1- | 0 - | 0 | 0- | 0 - | 0 |
| Story Telling | 0- | 0 - | 0 | 1- | 0 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 4- | 0 - | 0 | 1- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Role Plays | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 1- | 2 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 1- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 1- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Changes Topic | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 1- | 0 - | 0 | 1- | 0 - | 0 | 1- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Attention Getter | 7- | 0 - | 0 | 3- | 1 - | 0 | 8- | 1 - | 0 | 0- | 3 - | 0 | 5- | 14 - | 0 | 4- | 14 - | 0 | 18- | 15 - | 2 | 4- | 3 - | 2 | 6- | 6 - | 0 | 19- | 4 - | 0 | 7- | 5 - | 0 | 12- | 0 - | 3 | 1- | 3 - | 0 | 6- | 1 - | 0 |
| Answers in Unison | 0- | 1 - | 0 | 0- | 2 - | 0 | 0- | 0 - | 0 | 0- | 2 - | 1 | 12- | 24 - | 0 | 7- | 40 - | 0 | 0- | 0 - | 0 | 1- | 4 - | 0 | 2- | 7 - | 0 | 7- | 4 - | 0 | 0- | 1 - | 0 | 0- | 3 - | 0 | 5- | 3 - | 0 | 3- | 2 - | 0 |
| Anticipatory Answer | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 1- | 2 - | 0 | 0- | 12 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 1- | 3 - | 0 | 0- | 4 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Reads Aloud to Self | 0- | 0 - | 0 | 3- | 0 - | 1 | 0- | 0 - | 0 | 3- | 1 - | 0 | 1- | 0 - | 0 | 1- | 1 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 1- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Corrects/Teaches | 3- | 1 - | 0 | 1- | 5 - | 1 | 3- | 2 - | 0 | 4- | 2 - | 0 | 1- | 3 - | 0 | 5- | 6 - | 0 | 1- | 0 - | 1 | 2- | 1 - | 0 | 3- | 2 - | 0 | 2- | 4 - | 0 | 9- | 0 - | 2 | 1- | 0 - | 2 | 1- | 1 - | 0 | 3- | 0 - | 0 |
| Selective Memory | 0- | 2 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 2- | 0 - | 0 | 0- | 1 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 2- | 2 - | 0 | 0- | 2 - | 0 |
| Word Play | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 1- | 0 - | 0 | 0- | 2 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 2 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| NONVERBAL STRATEGIES | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Avoidance | 16 | | | 5 | | | 13 | | | 10 | | | 21 | | | 31 | | | 18 | | | 25 | | | 13 | | | 15 | | | 31 | | | 35 | | | 17 | | | 33 | | |
| Listening | 4 | | | 2 | | | 1 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | |
| Imitation | 3 | | | 1 | | | 0 | | | 3 | | | 5 | | | 1 | | | 3 | | | 3 | | | 3 | | | 0 | | | 5 | | | 3 | | | 3 | | | 2 | | |
| Mime | 1 | | | 2 | | | 7 | | | 3 | | | 6 | | | 8 | | | 7 | | | 3 | | | 7 | | | 2 | | | 1 | | | 2 | | | 1 | | | 1 | | |
| Identification | 2 | | | 2 | | | 3 | | | 15 | | | 11 | | | 6 | | | 1 | | | 3 | | | 3 | | | 3 | | | 1 | | | 10 | | | 0 | | | 0 | | |
| Demonstration | 0 | | | 0 | | | 0 | | | 0 | | | 2 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | |
| Attention Getter | 6 | | | 8 | | | 13 | | | 1 | | | 17 | | | 14 | | | 28 | | | 6 | | | 9 | | | 2 | | | 6 | | | 12 | | | 17 | | | 16 | | |
| Prefabricated Behavior | 1 | | | 0 | | | 0 | | | 2 | | | 0 | | | 1 | | | 0 | | | 1 | | | 0 | | | 0 | | | 1 | | | 2 | | | 0 | | | 0 | | |
| Writing | 1 | | | 6 | | | 1 | | | 2 | | | 3 | | | 3 | | | 0 | | | 1 | | | 4 | | | 4 | | | 3 | | | 4 | | | 6 | | | 4 | | |
| Checking/Copying Work | 0 | | | 1 | | | 1 | | | 3 | | | 0 | | | 1 | | | 1 | | | 0 | | | 0 | | | 0 | | | 1 | | | 1 | | | 2 | | | 1 | | |
| Self Correcting | 0 | | | 0 | | | 1 | | | 1 | | | 0 | | | 2 | | | 0 | | | 0 | | | 3 | | | 3 | | | 3 | | | 1 | | | 0 | | | 1 | | |
| Mouthing | 0 | | | 0 | | | 2 | | | 1 | | | 1 | | | 4 | | | 0 | | | 0 | | | 1 | | | 0 | | | 4 | | | 1 | | | 5 | | | 2 | | |
| Correcting/Teaching | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 1 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 1 | | |
| Anticipatory Answer | 0 | | | 0 | | | 0 | | | 0 | | | 2 | | | 1 | | | 0 | | | 0 | | | 2 | | | 1 | | | 0 | | | 1 | | | 1 | | | 0 | | |





BEST COPY AVAILABLE

APPENDIX D continued

SP II CHILDREN IN BILINGUAL CLASSROOMS

| | JANET | | | | | | JAIME | | | | | | BONITA | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | |
| | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS |
| **VERBAL STRATEGIES** | | | | | | | | | | | | | | | | | | |
| Language Switch | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 5 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Literal Translation | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Message Abandonment | 1- | 2 - | 0 | 0- | 1 - | 0 | 2- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 3- | 0 - | 0 |
| Formulaic Expression | 0- | 6 - | 0 | 2- | 6 - | 0 | 0- | 4 - | 0 | 1- | 10 - | 0 | 0- | 3 - | 0 | 3- | 10 - | 0 |
| Repetition | 10- | 13 - | 0 | 14- | 22 - | 0 | 14- | 10 - | 0 | 6- | 20 - | 1 | 12- | 9 - | 1 | 11- | 9 - | 2 |
| Appeal for Assistance | 0- | 0 - | 0 | 0- | 3 - | 0 | 2- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Memorization | 1- | 13 - | 0 | 2- | 1 - | 0 | 2- | 1 - | 0 | 0- | 1 - | 0 | 3- | 21 - | 0 | 6- | 20 - | 0 |
| Monitoring | 0- | 0 - | 0 | 2- | 5 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 1- | 2 - | 2 |
| Circumlocution | 0- | 0 - | 0 | 0- | 0 - | 0 | 1- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Pidginization | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Talks to Self | 0- | 0 - | 0 | 2- | 3 - | 0 | 1- | 2 - | 0 | 2- | 3 - | 0 | 4- | 4 - | 0 | 0- | 0- | 1 |
| One Word Answer | 1- | 1 - | 0 | 0- | 0 - | 0 | 0- | 3 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Elaboration | 2- | 19 - | 0 | 1- | 6 - | 0 | 4- | 0 - | 0 | 3- | 0 - | 0 | 0- | 1 - | 3 | 4- | 2 - | 3 |
| Clarification Request | 0- | 1 - | 0 | 0- | 2 - | 0 | 0- | 1 - | 0 | 1- | 0 - | 0 | 1- | 0 - | 0 | 3- | 1 - | 0 |
| Onomatopoeia | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 1- | 3 - | 0 | 0- | 2 - | 0 |
| Story Telling | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 1- | 0 - | 0 |
| Role Plays | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 2 - | 0 | 13- | 2 - | 0 |
| Changes Topic | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 1- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Attention Getter | 0- | 13 - | 0 | 4- | 18 - | 0 | 7- | 2 - | 0 | 8- | 9 - | 0 | 6- | 11 - | 0 | 8- | 12 - | 1 |
| Answers in Unison | 7- | 10 - | 0 | 7- | 11 - | 0 | 9- | 5 - | 0 | 1- | 7 - | 0 | 6- | 7 - | 0 | 2- | 7 - | 0 |
| Anticipatory Answer | 0- | 0 - | 0 | 0- | 1 - | 0 | 1 | 0 - | 0 | 0- | 2 - | 0 | 0- | 2 - | 0 | 0- | 5 - | 0 |
| Reads Aloud to Self | 0- | 0 - | 0 | 1- | 0 - | 0 | 1- | 1 - | 0 | 0- | 0 - | 0 | 1- | 0 - | 0 | 0- | 1 - | 0 |
| Corrects/Teaches | 1- | 6 - | 1 | 1- | 3 - | 1 | 1- | 2 - | 0 | 0- | 3 - | 0 | 2- | 3 - | 0 | 0- | 7 - | 0 |
| Selective Memory | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Word Play | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 1- | 1 - | 0 | 6- | 0 - | 0 |
| **NONVERBAL STRATEGIES** | | | | | | | | | | | | | | | | | | |
| Avoidance | 25 | | | 25 | | | 15 | | | 51 | | | 14 | | | 26 | | |
| Listening | 0 | | | 0 | | | 5 | | | 0 | | | 0 | | | 0 | | |
| Imitation | 5 | | | 1 | | | 1 | | | 0 | | | 1 | | | 1 | | |
| Mime | 3 | | | 0 | | | 3 | | | 1 | | | 4 | | | 8 | | |
| Identification | 2 | | | 5 | | | 9 | | | 11 | | | 14 | | | 7 | | |
| Demonstration | 1 | | | 0 | | | 0 | | | 0 | | | 1 | | | 0 | | |
| Attention Getter | 15 | | | 14 | | | 17 | | | 5 | | | 15 | | | 7 | | |
| Prefabricated Behavior | 8 | | | 1 | | | 3 | | | 1 | | | 0 | | | 1 | | |
| Writing | 3 | | | 3 | | | 2 | | | 2 | | | 1 | | | 0 | | |
| Checking/Copying Work | 1 | | | 1 | | | 3 | | | 0 | | | 0 | | | 0 | | |
| Self Correcting | 0 | | | 1 | | | 1 | | | 1 | | | 0 | | | 0 | | |
| Mouthing | 0 | | | 2 | | | 4 | | | 7 | | | 0 | | | 4 | | |
| Correcting/Teaching | 0 | | | 0 | | | 0 | | | 0 | | | 1 | | | 2 | | |
| Anticipatory Answer | 2 | | | 0 | | | 2 | | | 3 | | | 0 | | | 0 | | |

SP II CHILDREN IN SPANISH CLASSROOMS

| | ERNESTO | | | | | | JUSTIN | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Time I | | | Time II | | | Time I | | | Time II | | |
| | S | E | LS | S | E | LS | S | E | LS | S | E | LS |
| **VERBAL STRATEGIES** | | | | | | | | | | | | |
| Language Switch | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 2 |
| Literal Translation | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 2 - | 0 |
| Message Abandonment | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 1- | 2 - | 0 |
| Formulaic Expression | 1- | 6 - | 1 | 1- | 18 - | 0 | 4- | 7 - | 0 | 0- | 28 - | 0 |
| Repetition | 27- | 11 - | 1 | 26- | 8 - | 0 | 13- | 12 - | 0 | 12- | 21 - | 0 |
| Appeal for Assistance | 0- | 0 - | 0 | 2- | 0 - | 0 | 0- | 0 - | 0 | 2- | 0 - | 0 |
| Memorization | 4- | 3 - | 0 | 2- | 5 - | 0 | 4- | 2 - | 0 | 3- | 6 - | 0 |
| Monitoring | 4- | 0 - | 0 | 2- | 2 - | 0 | 3- | 1 - | 0 | 4- | 2 - | 0 |
| Circumlocution | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Pidginization | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Talks to Self | 3- | 1 - | 2 | 6- | 5 - | 0 | 4- | 2 - | 0 | 5- | 3 - | 0 |
| One Word Answer | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 2 - | 0 | 0- | 2 - | 0 |
| Elaboration | 6- | 2 - | 1 | 4- | 1 - | 0 | 8- | 12 - | 0 | 3- | 6 - | 0 |
| Clarification Request | 1- | 0 - | 0 | 4- | 0 - | 0 | 4- | 0 - | 0 | 1- | 0 - | 0 |
| Onomatopoeia | 0- | 0 - | 0 | 1- | 1 - | 0 | 0- | 1 - | 0 | 0- | 3 - | 0 |
| Story Telling | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 1 - | 0 |
| Role Plays | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 1 |
| Changes Topic | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 1 - | 0 |
| Attention Getter | 4- | 3 - | 0 | 4- | 11 - | 0 | 0- | 4 - | 0 | 6- | 4 - | 0 |
| Answers in Unison | 9- | 3 - | 0 | 4- | 6 - | 0 | 0- | 7 - | 0 | 9- | 3 - | 0 |
| Anticipatory Answer | 0- | 0 - | 0 | 1- | 0 - | 0 | 2- | 0 - | 0 | 0- | 4 - | 0 |
| Reads Aloud to Self | 2- | 0 - | 0 | 6- | 0 - | 0 | 0- | 0 - | 0 | 1- | 0 - | 0 |
| Corrects/Teaches | 9- | 0 - | 1 | 10- | 1 - | 0 | 1- | 1 - | 0 | 4- | 7 - | 0 |
| Selective Memory | 0- | 0 - | 0 | 0- | 2 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Word Play | 0- | 0 - | 0 | 4- | 0 - | 0 | 0- | 0 - | 0 | 1- | 0 - | 0 |
| **NONVERBAL STRATEGIES** | | | | | | | | | | | | |
| Avoidance | 2 | | | 7 | | | 5 | | | 12 | | |
| Listening | 3 | | | 0 | | | 1 | | | 0 | | |
| Imitation | 1 | | | 4 | | | 1 | | | 2 | | |
| Mime | 1 | | | 5 | | | 2 | | | 0 | | |
| Identification | 8 | | | 11 | | | 6 | | | 5 | | |
| Demonstration | 0 | | | 1 | | | 0 | | | 1 | | |
| Attention Getter | 6 | | | 7 | | | 8 | | | 8 | | |
| Prefabricated Behavior | 3 | | | 1 | | | 2 | | | 2 | | |
| Writing | 4 | | | 0 | | | 1 | | | 0 | | |
| Checking/Copying Work | 4 | | | 0 | | | 1 | | | 0 | | |
| Self Correcting | 1 | | | 0 | | | 1 | | | 0 | | |
| Mouthing | 2 | | | 2 | | | 0 | | | 1 | | |
| Correcting/Teaching | 0 | | | 0 | | | 0 | | | 1 | | |
| Anticipatory Answer | 0 | | | 1 | | | 0 | | | 1 | | |



BEST COPY AVAILABLE

APPENDIX D continued

SP II CHILDREN IN ENGLISH CLASSROOMS

| | ALBERTO | | | | | | CRISPIN | | | | | | LEA | | | | | | MARCELA | | | | | | ADRIANA | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | |
| | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS |
| **VERBAL STRATEGIES** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Language Switch | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 2 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Literal Translation | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 2 - | 0 |
| Message Abandonment | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 2 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 3 - | 0 | 0- | 1 - | 0 | 0- | 2 - | 0 | 0- | 2 - | 0 |
| Formulaic Expression | 0- | 6 - | 0 | 2- | 27 - | 0 | 0- | 3 - | 0 | 0- | 16 - | 0 | 0- | 6 - | 0 | 0- | 9 - | 0 | 1- | 15 - | 0 | 0- | 5 - | 0 | 1- | 15 - | 1 | 0- | 12 - | 0 |
| Repetition | 1- | 11 - | 0 | 0- | 18 - | 0 | 4- | 18 - | 0 | 0- | 26 - | 0 | 1- | 29 - | 0 | 1- | 20 - | 0 | 1- | 23 - | 1 | 0- | 22 - | 0 | 2- | 22 - | 0 | 2- | 12 - | 0 |
| Appeal for Assistance | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 2 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 2 - | 0 | 0- | 0 - | 0 | 0- | 5 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 |
| Memorization | 0- | 7 - | 0 | 0- | 6 - | 0 | 0- | 4 - | 0 | 0- | 1 - | 0 | 1- | 3 - | 0 | 2- | 12 - | 0 | 0- | 8 - | 1 | 0- | 7 - | 0 | 0- | 15 - | 0 | 0- | 7 - | 0 |
| Monitoring | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 2 - | 0 | 0- | 1 - | 0 | 0- | 7 - | 0 | 0- | 2 - | 0 | 0- | 0 - | 0 | 0- | 2 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 |
| Circumlocution | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Pigintization | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Talks to Self | 0- | 4 - | 0 | 0- | 9 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 4 - | 0 | 0- | 7 - | 0 | 0- | 1 - | 0 | 0- | 6 - | 0 | 0- | 2 - | 0 | 0- | 8 - | 0 |
| One Word Answer | 0- | 1 - | 0 | 0- | 3 - | 0 | 0- | 9 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 2 - | 0 | 0- | 0 - | 0 |
| Elaboration | 1- | 13 - | 0 | 0- | 21 - | 0 | 0- | 31 - | 0 | 0- | 4 - | 0 | 0- | 13 - | 0 | 0- | 10 - | 0 | 0- | 14 - | 0 | 0- | 11 - | 0 | 0- | 26 - | 1 | 3- | 4 - | 0 |
| Clarification Request | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 5 - | 0 | 0- | 0 - | 0 | 1- | 1 - | 0 | 0- | 1 - | 0 | 1- | 3 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 |
| Onomatopoeia | 0- | 2 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 2 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 |
| Story Telling | 0- | 2 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 3 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 2 - | 0 | 0- | 1 - | 0 | 1- | 2 - | 0 | 0- | 0 - | 0 |
| Role Plays | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 5 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 3 - | 1 |
| Changes Topic | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 5 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Attention Getter | 0- | 3 - | 0 | 0- | 11 - | 0 | 0- | 4 - | 0 | 0- | 2 - | 0 | 0- | 5 - | 0 | 0- | 14 - | 0 | 2- | 15 - | 0 | 11- | 31 - | 1 | 3- | 30 - | 0 | 4- | 21 - | 0 |
| Answers in Unison | 0- | 3 - | 0 | 2- | 4 - | 0 | 1- | 10 - | 0 | 0- | 13 - | 0 | 0- | 4 - | 1 | 0- | 19 - | 0 | 0- | 4 - | 0 | 0- | 0 - | 0 | 0- | 10 - | 0 | 0- | 6 - | 0 |
| Anticipatory Answer | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 2 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 4 - | 0 | 0- | 1 - | 0 | 0- | 3 - | 0 |
| Reads Aloud to Self | 0- | 0 - | 0 | 1- | 0 - | 0 | 0- | 0 - | 0 | 0- | 2 - | 0 | 0- | 4 - | 0 | 0- | 2 - | 0 | 0- | 2 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 2 - | 0 |
| Corrects/Teaches | 0- | 3 - | 0 | 0- | 3 - | 0 | 0- | 1 - | 0 | 0- | 1 - | 0 | 0- | 4 - | 0 | 3- | 8 - | 0 | 1- | 3 - | 0 | 1- | 3 - | 0 | 1- | 4 - | 0 | 2- | 12 - | 2 |
| Selective Memory | 0- | 0 - | 0 | 2- | 5 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 |
| Word Play | 0- | 0 - | 0 | 0- | 4 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| **NONVERBAL STRATEGIES** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Avoidance | 4 | | | 6 | | | 8 | | | 28 | | | 6 | | | 11 | | | 18 | | | 18 | | | 14 | | | 21 | | |
| Listening | 2 | | | 2 | | | 0 | | | 0 | | | 1 | | | 1 | | | 0 | | | 0 | | | 2 | | | 0 | | |
| Imitation | 0 | | | 0 | | | 1 | | | 2 | | | 0 | | | 2 | | | 2 | | | 2 | | | 3 | | | 2 | | |
| Mime | 1 | | | 5 | | | 3 | | | 3 | | | 1 | | | 5 | | | 3 | | | 8 | | | 0 | | | 5 | | |
| Identification | 2 | | | 7 | | | 7 | | | 4 | | | 4 | | | 12 | | | 1 | | | 6 | | | 0 | | | 3 | | |
| Demonstration | 0 | | | 0 | | | 0 | | | 1 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | |
| Attention Getter | 6 | | | 9 | | | 14 | | | 6 | | | 8 | | | 13 | | | 19 | | | 10 | | | 6 | | | 17 | | |
| Prefabricated Behavior | 0 | | | 1 | | | 0 | | | 0 | | | 1 | | | 2 | | | 2 | | | 1 | | | 2 | | | 0 | | |
| Writing | 5 | | | 4 | | | 3 | | | 2 | | | 2 | | | 1 | | | 3 | | | 2 | | | 1 | | | 2 | | |
| Checking/Copying Work | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 1 | | | 3 | | | 1 | | | 0 | | | 0 | | |
| Self Correcting | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 1 | | | 0 | | | 1 | | | 2 | | |
| Mouthing | 0 | | | 1 | | | 1 | | | 1 | | | 1 | | | 0 | | | 2 | | | 0 | | | 2 | | | 1 | | |
| Correcting/Teaching | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 1 | | | 0 | | |
| Anticipatory Answer | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 2 | | | 0 | | | 0 | | | 0 | | |



BEST COPY AVAILABLE

APPENDIX D

SP II CHILDREN IN ENGLISH CLASSROOMS

| | LORENZO | | | | | | FRANCISCO | | | | | | RICARDO | | | | | | DORIS | | | | | | JUANITA | | | | | | JIMMY | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | |
| | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS |
| **VERBAL STRATEGIES** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Language Switch | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Literal Translation | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 4 - | 0 | 0- | 2 - | 0 |
| Message Abandonment | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Formulaic Expression | 0- | 4 - | 0 | 0- | 2 - | 0 | 0- | 3 - | 0 | 0- | 7 - | 0 | 0- | 1 - | 0 | 0- | 1 - | 0 | 0- | 4 - | 0 | 0- | 4 - | 0 | 1- | 1 - | 0 | 1- | 5 - | 0 | 0- | 11 - | 0 | 0- | 4 - | 0 |
| Repetition | 3- | 10 - | 0 | 0- | 10 - | 0 | 0- | 18 - | 0 | 0- | 21 - | 0 | 5- | 9 - | 0 | 0- | 14 - | 0 | 0- | 6 - | 0 | 0- | 5 - | 0 | 0- | 6 - | 0 | 0- | 22 - | 0 | 0- | 14 - | 0 | 0- | 18 - | 2 |
| Appeal for Assistance | 1- | 5 - | 0 | 0- | 4 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 11 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 3 - | 0 | 0- | 1 - | 0 | 0- | 2 - | 0 |
| Memorization | 0- | 2 - | 0 | 0- | 4 - | 0 | 0- | 2 - | 0 | 0- | 5 - | 0 | 0- | 4 - | 0 | 0- | 1 - | 0 | 0- | 6 - | 0 | 0- | 3 - | 0 | 0- | 0 - | 0 | 0- | 2 - | 0 | 0- | 7 - | 0 | 0- | 12 - | 0 |
| Monitoring | 0- | 2 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 5 - | 0 | 0- | 3 - | 0 | 0- | 7 - | 0 | 0- | 3 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 8 - | 0 | 0- | 0 - | 0 |
| Circumlocution | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 |
| Pidgenization | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Talks to Self | 0- | 3 - | 0 | 0- | 4 - | 0 | 0- | 0 - | 0 | 0- | 2 - | 0 | 0- | 3 - | 0 | 0- | 2 - | 0 | 0- | 5 - | 0 | 0- | 5 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 2 - | 0 | 0- | 0 - | 0 |
| One Word Answer | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 1 - | 0 |
| Elaboration | 0- | 2 - | 0 | 0- | 3 - | 0 | 0- | 6 - | 0 | 0- | 10 - | 0 | 0- | 5 - | 0 | 0- | 16 - | 0 | 0- | 6 - | 0 | 0- | 4 - | 0 | 0- | 1 - | 0 | 0- | 8 - | 0 | 0- | 8 - | 0 | 0- | 9 - | 0 |
| Clarification Request | 0- | 4 - | 0 | 0- | 4 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 1 - | 0 | 0- | 5 - | 0 |
| Onomatopoeia | 0- | 0 - | 0 | 0- | 3 - | 0 | 0- | 1 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 |
| Story Telling | 0- | 2 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 10 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 2 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Role Plays | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 2 - | 0 | 0- | 0 - | 0 | 0- | 2 - | 0 |
| Changes Topic | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 3 - | 0 | 0- | 1 - | 0 |
| Attention Getter | 1- | 12 - | 0 | 0- | 7 - | 0 | 0- | 10 - | 0 | 0- | 9 - | 0 | 0- | 5 - | 0 | 0- | 6 - | 0 | 0- | 9 - | 0 | 0- | 5 - | 0 | 0- | 0 - | 0 | 0- | 8 - | 0 | 0- | 10 - | 0 | 2- | 25 - | 0 |
| Answers in Unison | 0- | 2 - | 0 | 0- | 7 - | 0 | 0- | 5 - | 0 | 0- | 3 - | 0 | 0- | 4 - | 0 | 0- | 0 - | 0 | 0- | 6 - | 0 | 0- | 2 - | 0 | 0- | 0 - | 0 | 0- | 2 - | 0 | 0- | 2 - | 0 | 0- | 5 - | 0 |
| Anticipatory Answer | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 2 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 2 - | 0 | 0- | 0 - | 0 | 0- | 2 - | 0 | 0- | 2 - | 0 |
| Reads Aloud to Self | 0- | 2 - | 0 | 0- | 3 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 9 - | 0 | 1- | 3 - | 0 | 0- | 0 - | 0 | 0- | 2 - | 0 | 0- | 1 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 2 - | 0 |
| Corrects/Teaches | 0- | 0 - | 0 | 0- | 3 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 3 - | 0 | 0- | 4 - | 1 | 0- | 5 - | 0 | 0- | 6 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 |
| Selective Memory | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 |
| Word Play | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 3 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| **NONVERBAL STRATEGIES** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Avoidance | | 9 | | | 7 | | | 10 | | | 9 | | | 18 | | | 4 | | | 9 | | | 3 | | | 2 | | | 15 | | | 14 | | | 8 | |
| Listening | | 1 | | | 0 | | | 1 | | | 0 | | | 0 | | | 0 | | | 0 | | | 1 | | | 0 | | | 0 | | | 0 | | | 0 | |
| Imitation | | 0 | | | 0 | | | 1 | | | 1 | | | 2 | | | 1 | | | 1 | | | 0 | | | 1 | | | 2 | | | 0 | | | 0 | |
| Mime | | 0 | | | 0 | | | 1 | | | 2 | | | 0 | | | 2 | | | 0 | | | 0 | | | 1 | | | 0 | | | 2 | | | 0 | |
| Identification | | 4 | | | 5 | | | 5 | | | 3 | | | 2 | | | 1 | | | 6 | | | 2 | | | 3 | | | 3 | | | 1 | | | 3 | |
| Demonstration | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | |
| Attention Getter | | 4 | | | 5 | | | 6 | | | 5 | | | 8 | | | 9 | | | 8 | | | 1 | | | 2 | | | 0 | | | 6 | | | 4 | |
| Prefabricated Behavior | | 1 | | | 0 | | | 1 | | | 1 | | | 1 | | | 1 | | | 2 | | | 1 | | | 0 | | | 1 | | | 1 | | | 2 | |
| Writing | | 0 | | | 2 | | | 0 | | | 1 | | | 2 | | | 1 | | | 1 | | | 3 | | | 0 | | | 0 | | | 0 | | | 2 | |
| Checking/Copying Work | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | |
| Self Correcting | | 1 | | | 0 | | | 0 | | | 1 | | | 2 | | | 2 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | |
| Mouthing | | 0 | | | 1 | | | 2 | | | 0 | | | 2 | | | 0 | | | 1 | | | 3 | | | 0 | | | 1 | | | 1 | | | 0 | |
| Correcting/Teaching | | 0 | | | 0 | | | 0 | | | 1 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | |
| Anticipatory Answer | | 0 | | | 3 | | | 0 | | | 0 | | | 0 | | | 2 | | | 1 | | | 0 | | | 0 | | | 1 | | | 0 | | | 0 | |



BEST COPY AVAILABLE

APPENDIX D continued

EP CHILDREN IN BILINGUAL CLASSROOMS

| | ENRIQUE | | | | | |
|---|---|---|---|---|---|---|
| | Time I | | | Time II | | |
| | S | E | LS | S | E | LS |
| **VERBAL STRATEGIES** | | | | | | |
| Language Switch | 2- | 3 - | 0 | 0- | 0 - | 0 |
| Literal Translation | 0- | 1 - | 0 | 0- | 0 - | 0 |
| Message Abandonment | 0- | 2 - | 0 | 0- | 4 - | 0 |
| Formulaic Expression | 1- | 4 - | 0 | 2- | 30 - | 0 |
| Repetition | 1- | 17 - | 0 | 23- | 21 - | 0 |
| Appeal for Assistance | 0- | 0 - | 0 | 2- | 3 - | 0 |
| Memorization | 0- | 2 - | 0 | 0- | 1 - | 0 |
| Monitoring | 1- | 2 - | 0 | 1- | 2 - | 0 |
| Circumlocution | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Pidginization | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Talks to Self | 0- | 26 - | 0 | 13- | 15 - | 0 |
| One Word Answer | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Elaboration | 1- | 24 - | 0 | 3- | 13 - | 0 |
| Clarification Request | 0- | 2 - | 0 | 3- | 3 - | 0 |
| Onomatopoeia | 0- | 3 - | 0 | 0- | 3 - | 0 |
| Story Telling | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Role Plays | 0- | 8 - | 0 | 0- | 0 - | 0 |
| Changes Topic | 0- | 2 - | 0 | 0- | 1 - | 0 |
| Attention Getter | 0- | 11 - | 0 | 0- | 23 - | 0 |
| Answers in Unison | 0- | 4 - | 0 | 2- | 3 - | 0 |
| Anticipatory Answer | 0- | 3 - | 0 | 0- | 3 - | 0 |
| Reads Aloud to Self | 0- | 1 - | 0 | 1- | 9 - | 0 |
| Corrects/Teaches | 0- | 3 - | 0 | 1- | 0 - | 0 |
| Selective Memory | 0- | 0 - | 0 | 0- | 1 - | 0 |
| Word Play | 0- | 0 - | 0 | 1- | 2 - | 0 |
| **NONVERBAL STRATEGIES** | | | | | | |
| Avoidance | 27 | | | 30 | | |
| Listening | 1 | | | 2 | | |
| Imitation | 0 | | | 1 | | |
| Mime | 5 | | | 4 | | |
| Identification | 8 | | | 7 | | |
| Demonstration | 1 | | | 1 | | |
| Attention Getter | 6 | | | 2 | | |
| Prefabricated Behavior | 3 | | | 0 | | |
| Writing | 3 | | | 1 | | |
| Checking/Copying Work | 4 | | | 0 | | |
| Self Correcting | 0 | | | 2 | | |
| Mouthing | 1 | | | 5 | | |
| Correcting/Teaching | 0 | | | 0 | | |
| Anticipatory Answer | 2 | | | 2 | | |

SP I CHILDREN IN SPANISH CLASSROOMS

| | MARISOL | | | | | | ALICIA | | | | | | ROBERTO | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | |
| | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS |
| **VERBAL STRATEGIES** | | | | | | | | | | | | | | | | | | |
| Language Switch | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Literal Translation | 0- | 0 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Message Abandonment | 0- | 0 - | 0 | 0- | 1 - | 0 | 1- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Formulaic Expression | 2- | 1 - | 0 | 2- | 7 - | 0 | 0- | 9 - | 0 | 3- | 10 - | 0 | 1- | 2 - | 0 | 0- | 1 - | 0 |
| Repetition | 12- | 0 - | 0 | 9- | 2 - | 0 | 10- | 5 - | 1 | 3- | 2 - | 0 | 5- | 0 - | 2 | 7- | 11 - | 0 |
| Appeal for Assistance | 0- | 0 - | 0 | 0- | 0 - | 0 | 1- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Memorization | 5- | 0 - | 0 | 1- | 0 - | 0 | 1- | 0 - | 0 | 0- | 2 - | 0 | 3- | 0 - | 0 | 5- | 5 - | 0 |
| Monitoring | 0- | 0 - | 0 | 1- | 0 - | 0 | 0- | 0 - | 0 | 1- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Circumlocution | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Pidginization | 0- | 0 - | 0 | 0- | 0 - | 0 | 2- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Talks to Self | 1- | 0 - | 0 | 0- | 0 - | 0 | 3- | 0 - | 0 | 3- | 1 - | 0 | 1- | 0 - | 0 | 3- | 2 - | 1 |
| One Word Answer | 1- | 0 - | 0 | 0- | 0 - | 0 | 0- | 3 - | 0 | 0- | 1 - | 0 | 1- | 0 - | 0 | 0- | 0 - | 0 |
| Elaboration | 6- | 2 - | 0 | 6- | 0 - | 0 | 9- | 2 - | 0 | 3- | 2 - | 0 | 0- | 0 - | 0 | 4- | 1 - | 0 |
| Clarification Request | 0- | 0 - | 0 | 4- | 0 - | 0 | 0- | 0 - | 0 | 1- | 0 - | 0 | 0- | 0 - | 0 | 1- | 0 - | 0 |
| Onomatopoeia | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 1- | 0 - | 0 | 0- | 0 - | 0 |
| Story Telling | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Role Plays | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Changes Topic | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Attention Getter | 1- | 1 - | 0 | 5- | 1 - | 0 | 4- | 3 - | 0 | 2- | 1 - | 0 | 5- | 0 - | 1 | 4- | 6 - | 1 |
| Answers in Unison | 8- | 1 - | 0 | 0- | 0 - | 0 | 3- | 2 - | 0 | 0- | 0 - | 0 | 1- | 0 - | 0 | 0- | 0 - | 0 |
| Anticipatory Answer | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| Reads Aloud to Self | 0- | 0 - | 0 | 9- | 2 - | 0 | 0- | 0 - | 0 | 2- | 0 - | 0 | 3- | 0 - | 0 | 0- | 0 - | 0 |
| Corrects/Teaches | 5- | 0 - | 0 | 5- | 0 - | 0 | 3- | 0 - | 0 | 4- | 0 - | 0 | 1- | 1 - | 0 | 6- | 1 - | 0 |
| Selective Memory | 0- | 0 - | 0 | 0- | 2 - | 0 | 0- | 1 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 1 - | 0 |
| Word Play | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 | 0- | 0 - | 0 |
| **NONVERBAL STRATEGIES** | | | | | | | | | | | | | | | | | | |
| Avoidance | 15 | | | 5 | | | 7 | | | 20 | | | 19 | | | 24 | | |
| Listening | 2 | | | 1 | | | 3 | | | 1 | | | 0 | | | 2 | | |
| Imitation | 0 | | | 4 | | | 1 | | | 0 | | | 0 | | | 1 | | |
| Mime | 1 | | | 1 | | | 0 | | | 0 | | | 2 | | | 4 | | |
| Identification | 1 | | | 9 | | | 2 | | | 3 | | | 3 | | | 6 | | |
| Demonstration | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | |
| Attention Getter | 14 | | | 4 | | | 5 | | | 5 | | | 11 | | | 12 | | |
| Prefabricated Behavior | 0 | | | 6 | | | 0 | | | 3 | | | 0 | | | 4 | | |
| Writing | 1 | | | 8 | | | 2 | | | 4 | | | 6 | | | 2 | | |
| Checking/Copying Work | 2 | | | 1 | | | 2 | | | 3 | | | 2 | | | 4 | | |
| Self Correcting | 0 | | | 1 | | | 0 | | | 0 | | | 0 | | | 0 | | |
| Mouthing | 1 | | | 1 | | | 0 | | | 1 | | | 2 | | | 4 | | |
| Correcting/Teaching | 0 | | | 1 | | | 1 | | | 0 | | | 0 | | | 0 | | |
| Anticipatory Answer | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | |



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APPENDIX D continued

EP CHILDREN IN ENGLISH CLASSROOMS

| | GREGORIO | | | | | | MIKE | | | | | | RUTH | | | | | | ISMAEL | | | | | | SUSAN | | | | | | CARMEN | | | | | | JUDY | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | | Time I | | | Time II | | |
| | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS | S | E | LS |
| VERBAL STRATEGIES | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Language Switch | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Literal Translation | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Message Abandonment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Formulaic Expression | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 11 | 0 | 0 | 12 | 0 | 0 | 14 | 0 | 0 | 15 | 0 | 0 | 15 | 0 | 2 | 1 | 0 | 0 | 5 | 0 |
| Repetition | 0 | 7 | 0 | 0 | 11 | 0 | 0 | 10 | 0 | 0 | 11 | 0 | 0 | 9 | 0 | 0 | 4 | 0 | 0 | 17 | 0 | 0 | 8 | 0 | 0 | 33 | 0 | 1 | 13 | 0 | 0 | 22 | 0 | 0 | 25 | 0 | 0 | 12 | 0 | 0 | 6 | 0 |
| Appeal for Assistance | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 |
| Memorization | 0 | 4 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 3 | 0 | 1 | 5 | 0 | 0 | 7 | 0 | 0 | 8 | 0 | 0 | 10 | 0 | 0 | 17 | 1 | 0 | 5 | 0 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 2 | 0 |
| Monitoring | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 0 |
| Circumlocution | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pidginization | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Talks to Self | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 7 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 7 | 0 | 0 | 3 | 0 | 0 | 4 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| One word Answer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 |
| Elaboration | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 2 | 0 | 0 | 4 | 0 | 0 | 1 | 0 | 0 | 14 | 0 | 0 | 13 | 0 | 0 | 10 | 0 | 0 | 21 | 0 | 0 | 12 | 0 | 0 | 2 | 0 |
| Clarification Request | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 4 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 7 | 0 |
| Onomatopoeia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Story Telling | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Role Plays | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Changes Topic | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Attention Getter | 0 | 1 | 1 | 0 | 6 | 0 | 0 | 11 | 0 | 0 | 14 | 0 | 0 | 8 | 0 | 0 | 7 | 0 | 0 | 13 | 0 | 0 | 9 | 0 | 0 | 9 | 1 | 0 | 4 | 0 | 0 | 6 | 0 | 0 | 12 | 0 | 0 | 8 | 0 | 0 | 2 | 0 |
| Answers in Unison | 0 | 3 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 5 | 0 | 0 | 4 | 0 | 0 | 10 | 0 | 0 | 12 | 0 | 0 | 11 | 0 | 0 | 4 | 0 | 0 | 1 | 0 | 0 | 4 | 0 | 0 | 2 | 0 |
| Anticipatory Answer | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reads Aloud to Self | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 9 | 0 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Corrects/Teaches | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 14 | 0 | 0 | 2 | 0 | 0 | 3 | 0 |
| Selective Memory | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Word Play | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Avoidance | 6 | | | 9 | | | 11 | | | 18 | | | 5 | | | 9 | | | 10 | | | 6 | | | 8 | | | 13 | | | 7 | | | 16 | | | 15 | | | 4 | | |
| Listening | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 1 | | | 0 | | | 3 | | | 2 | | | 1 | | | 0 | | |
| Imitation | 1 | | | 2 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 4 | | | 4 | | | 2 | | | 0 | | | 2 | | | 1 | | |
| Mime | 1 | | | 1 | | | 2 | | | 1 | | | 1 | | | 0 | | | 3 | | | 2 | | | 3 | | | 4 | | | 1 | | | 2 | | | 0 | | | 0 | | |
| Identification | 2 | | | 4 | | | 1 | | | 2 | | | 2 | | | 0 | | | 1 | | | 2 | | | 4 | | | 0 | | | 3 | | | 2 | | | 2 | | | 0 | | |
| Demonstration | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 3 | | | 1 | | | 0 | | | 0 | | | 0 | | |
| Attention Getter | 3 | | | 5 | | | 5 | | | 11 | | | 9 | | | 4 | | | 9 | | | 16 | | | 11 | | | 11 | | | 7 | | | 5 | | | 6 | | | 16 | | |
| Prefabricated Behavior | 3 | | | 5 | | | 0 | | | 1 | | | 1 | | | 0 | | | 0 | | | 1 | | | 2 | | | 1 | | | 1 | | | 0 | | | 0 | | | 7 | | |
| Writing | 1 | | | 4 | | | 2 | | | 2 | | | 2 | | | 1 | | | 0 | | | 1 | | | 3 | | | 3 | | | 3 | | | 3 | | | 4 | | | 4 | | |
| Checking/Copying Work | 1 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 1 | | | 4 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | |
| Self Correcting | 0 | | | 0 | | | 2 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 1 | | | 0 | | | 0 | | | 0 | | | 2 | | |
| Mouthing | 4 | | | 0 | | | 0 | | | 2 | | | 1 | | | 0 | | | 1 | | | 2 | | | 0 | | | 1 | | | 2 | | | 2 | | | 0 | | | 3 | | |
| Correcting/Teaching | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | |
| Anticipatory Answer | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 1 | | | 0 | | | 0 | | |



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# APPENDIX E

## TARGET-INITIATED VS. OTHER-INITIATED EPISODES BY CHILD WITHIN CLASSROOM TYPE

APPENDIX E

TARGET-INITIATED VS. OTHER-INITIATED EPISODES
BY CHILD WITHIN CLASSROOM TYPE

SP I CHILDREN

| | Fall | | | | Spring | | | |
|---|---|---|---|---|---|---|---|---|
| | Other | | Target | | Other | | Target | |
| | S | E | S | E | S | E | S | E |
| CLASSROOM | %[1] | % | %[1] | % | %[1] | % | %[1] | % |
| English | | | | | | | | |
| Julio | - | 87 | - | 92 | - | 96 | - | 98 |
| Vicky | - | 92 | - | 46 | 2 | 87 | - | 60 |
| Ramon | 3 | 94 | 14 | 71 | 2 | 88 | - | 81 |
| Cándido | - | 97 | 10 | 71 | 6 | 85 | 8 | 74 |
| Ivette | 12 | 71 | 13 | 74 | 17 | 75 | 23 | 67 |
| Esteban | 15 | 75 | 27 | 41 | 10 | 79 | 49 | 19 |
| Dominga | 13 | 89 | 21 | 41 | 9 | 82 | 20 | 61 |
| Bilingual | | | | | | | | |
| Reynaldo | 28 | 70 | 26 | 46 | 45 | 47 | 23 | 63 |
| Bárbara | 26 | 64 | 59 | 27 | 10 | 68 | 35 | 53 |
| Marta | 29 | 56 | 17 | 57 | 26 | 64 | 28 | 54 |
| Miguel | 50 | 35 | 43 | 30 | 46 | 46 | 60 | 28 |
| Raimundo | 25 | 62 | 29 | 22 | 54 | 38 | 67 | 26 |
| Carlos | 52 | 33 | 72 | 8 | 50 | 35 | 73 | 16 |
| Jaime | 36 | 42 | 51 | 9 | 59 | 33 | 45 | 6 |
| Spanish | | | | | | | | |
| Marisol | 84 | 14 | 67 | 11 | 64 | 30 | 67 | 14 |
| Alicia | 51 | 46 | 62 | 24 | 44 | 50 | 66 | 14 |
| Roberto | 59 | 36 | 74 | 10 | 59 | 33 | 57 | 22 |

[1] Percentages do not total 100% due to the nonverbal episodes not included here.

APPENDIX E continued

SP II CHILDREN

| | Fall | | | | Spring | | | |
|---|---|---|---|---|---|---|---|---|
| | Other | | Target | | Other | | Target | |
| CLASSROOM | S %[1] | E % | S %[1] | E % | S %[1] | E % | S %[1] | E % |
| English | | | | | | | | |
| Lorenzo | - | 95 | 12 | 79 | 1 | 85 | 1 | 86 |
| Francisco | - | 93 | - | 83 | - | 93 | - | 98 |
| Ricardo | 9 | 84 | - | 94 | - | 94 | 2 | 90 |
| Doris | - | 91 | - | 89 | - | 89 | - | 89 |
| Juanita | - | 95 | 5 | 86 | - | 96 | 3 | 84 |
| Jimmy | 5 | 90 | - | 79 | 9 | 85 | 12 | 82 |
| Alberto | 7 | 77 | 2 | 93 | 1 | 79 | - | 94 |
| Crispin | 4 | 96 | - | 83 | 1 | 96 | - | 90 |
| Lea | 3 | 85 | 3 | 84 | 4 | 93 | 9 | 72 |
| Marcela | 20 | 74 | 27 | 56 | 9 | 82 | 22 | 61 |
| Adriana | 5 | 88 | 20 | 71 | 14 | 76 | 24 | 69 |
| Bilingual | | | | | | | | |
| Janet | 33 | 54 | 13 | 66 | 23 | 71 | 22 | 61 |
| Jaime | 44 | 30 | 46 | 17 | 47 | 47 | 62 | 27 |
| Bonita | 50 | 40 | 51 | 38 | 45 | 49 | 49 | 42 |
| Spanish | | | | | | | | |
| Ernesto | 68 | 27 | 72 | 19 | 65 | 20 | 61 | 24 |
| Justin | 47 | 52 | 48 | 42 | 41 | 48 | 54 | 40 |

[1] Percentages do not total 100% due to the nonverbal episodes not included here.

EN CHILDREN

| | Fall | | | | Spring | | | |
|---|---|---|---|---|---|---|---|---|
| | Other | | Target | | Other | | Target | |
| CLASSROOM | S %[1] | E % | S %[1] | E % | S %[1] | E % | S %[1] | E % |
| English | | | | | | | | |
| Gregorio | - | 83 | - | 54 | - | 91 | - | 85 |
| Mike | - | 93 | - | 85 | - | 93 | - | 83 |
| Ruth | 1 | 88 | - | 75 | - | 87 | - | 88 |
| Ismael | - | 93 | - | 100[2] | 1 | 88 | - | 86 |
| Susan | - | 91 | 2 | 91 | 2 | 84 | - | 81 |
| Carmen | 3 | 78 | - | 97 | - | 89 | 1 | 89 |
| Judy | 3 | 91 | 5 | 68 | - | 90 | - | 61 |
| Bilingual | | | | | | | | |
| Enrique | 27 | 64 | 7 | 85 | 33 | 80 | 14 | 78 |

[1] Percentages do not total 100% due to the nonverbal episodes not included here.

[2] No nonverbal episodes were observed during this time period.